

OTS: 60-11,415

JPRS: 2407

27 May 1960

Reproduced From  
Best Available Copy

SOVIET ABSTRACTS  
CHEMISTRY

RETURN TO MAIN FILE

Book No. 23, 1959

Abstracts 80906 thru 84552

**DISTRIBUTION STATEMENT A**

Approved for Public Release  
Distribution Unlimited

19990714 109

Distributed by:

OFFICE OF TECHNICAL SERVICES  
U. S. DEPARTMENT OF COMMERCE  
WASHINGTON 25, D. C.

U. S. JOINT PUBLICATIONS RESEARCH SERVICE  
205 EAST 42nd STREET, SUITE 300  
NEW YORK 17, N. Y.

JPRS: 2407  
CSO: 3410-N

SELECTED TRANSLATIONS OF  
ABSTRACT IN REFERATIVNYY ZHURNAL - KHIMIYA, No. 23, 1959.

This report consists of complete translations of the Russian-language abstracts of articles which were originally published in the Sino-Soviet bloc and in Yugoslavia, excluding the USSR.

The Soviet subject classification system used in the original Russian language abstracts has been followed in this publication.



COUNTRY : Poland B-1  
CATEGORY : Physical Chemistry. General Problems.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 80906  
AUTHOR : Stronski, Ignacy  
INST. : Not given  
TITLE : International Conference of Nuclear Spectroscopy and Radiochemistry Held at the United Institute of Nuclear Research in \*  
ORIG. PUB. : Kosmos (Polska), 1958, B4, #4, 347-352.  
ABSTRACT : No Abstract.

CARD: 1/1

\* Dubno, USSR. 11-14 February 1958

COUNTRY : Czechoslovakia B-3  
CATEGORY : Physical Chemistry. Atom.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 80930  
AUTHOR : Horak, Zdenek  
INST. : Not given  
TITLE : Analytical Wave Functions of K-State in Neon  
ORIG. PUB. : Ceskosl. casop. fys., 1958, 8, #6, 734  
Czechosl Phys. Z., 1958, 8, #6, 745  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : Poland B-3  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 80934  
AUTHOR : Kunisz, Maria D.  
INST. : Not given  
TITLE : Evaluation of Spectral Line Intensities of  
Some I and II Doublets in Secondary Series,  
In the Arc Spectra of Aluminum and Indium.  
ORIG. PUB. : Acta phys. polon., 1958, 17, #6, 455-461.  
ABSTRACT : The intensity ratio component of secondary  
series doublets in spectra of Al I and In I  
were measured. Deviations from the interval  
rule depend on the doublet's place in the  
series.

-- N. Yashin

CARD: 1/1

COUNTRY : Poland B-4  
CATEGORY : Physical Chemistry. Molecule. Chemical  
Bond.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 80956  
AUTHOR : Franckowiak, D.; Korbitt, L.; Korbitt, T.  
INST. : Not given.  
TITLE : Fluorescence of Solutions of Eosine in  
Glucose  
ORIG. PUB. : Bull. Acad. polon. sci. Ser. sci. math.,  
astron., et phys., 1958, 6, #12, 781-783.  
ABSTRACT : Absorption and fluorescence (F) spectra  
as well as discharges-F ( $\eta_F$ ) upon excita-  
tion of glucose solutions of eosine (I)  
(prepared by boiling at different tempera-  
tures and pressures, b.p. 50-140) by var-  
ious wave lengths were investigated. I's  
concentration was  $2 \times 10^{-5}$  g per l of glu-  
cose. The change of boiling temperature  
did not cause a change or a shift of the  
fluorescence band with its maximum at 5500 A.  
The fluorescence band is ascribed to the  
non-associated molecules of I. At the same

CARD: 1/3

COUNTRY : Poland  
CATEGORY :

B-4

ABS. JOUR. : RZKhim., No. 23 1959, No. 80956

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : time the absorption spectrum of I changes considerably with the increase of boiling temperature, while the maximum at 5300 Å decreases and that at 5100 Å increases. The first maximum is apparently caused by dimers, while the second is due to monomers.  $\eta_F$  for I in glucose was determined by a comparison with a known  $\eta_F$  in water solution of I. Upon an increase of boiling temperature  $\eta_F$  increases a little, while the drop in transmissivity, starting at  $\lambda$ (excitation) 5450 Å is still slower. The observed phenomena

CARD: 2/3

COUNTRY : Poland  
CATEGORY :

B-4

ABS. JOUR. : RZKhim., No. 23 1959, No. 80956

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : were explained by the fact that upon an increase of boiling temperature the number of I dimers decreases while the number of monomers increases. Antistoke's drop of  $\eta_F$ , which starts at 5450 Å is explained by the presence of dimers absorption band in this region.

-- V. Yermolaev

CARD: 3/3

COUNTRY : RUMANIA B-4  
CATEGORY : Physical Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 80957  
AUTHOR : Agirbiceanu, I.; Hagiescu-Miriste, M.; \*  
INST. : Inst. petrol si gaze, Bucuresti  
TITLE : Fluorescent Spectra of the Products Formed Upon  
a High Frequency Electrical Discharge in  
Gaseous Aromatic Hydrocarbons.  
ORIG. PUB. : Lucrarile Inst. petrol. si gaze Bucuresti,  
1957, 3, 327-329.  
ABSTRACT : The real distribution of energy in fluor-  
escent spectra (4046-6233 A) of substances  
formed upon high frequency electrical dis-  
charge (outer electrodes) in vapors of ben-  
zene, toluene, o-xylene, m-xylene and  
p-xylene was studied in order to determine  
the complexity of the molecules formed upon  
the discharge. From the energy distribution  
curves for various substances studied the  
proof of B. C. Neporent and B. I. Stepanov  
theories was deduced (Uspekhy phys. Nauk,  
1951, XVIII, #3). This proof is based on  
CARD: 1/2

\* Weismann, I.

COUNTRY : Rumania B-4  
CATEGORY : Physical Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 80957  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : the assumption that when the molecules  
become more complex, the probability of  
inner redistribution of energy increases.  
It was observed that the fluorescent in-  
tensity of the studied substances decreased  
in fact from the less complex benzene de-  
rivatives to the more complex xylene de-  
rivatives.

-- From Author's Resume

CARD: 2/2

COUNTRY : GDR B-4  
CATEGORY : Physical Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81025  
AUTHOR : Weber, K. -H  
INST. : Not given  
TITLE : Explanation of the Proton Magnetic Absorption Resonance in Oriented Liquid azoxyphenol-p-n-Alkylether Crystals  
ORIG. PUB. : Ann. Physik, 1959, 3, #1-2, 1-27.  
ABSTRACT : A detailed theoretical analysis of structure and of the intramolecular rotation modes in liquid crystals of azoxyphenol-p-n-alkylether was presented. The magnetic proton resonance data was used to this end. The second moment (SM) of absorption line was calculated by assuming that the inner rotation is slightly delayed. SM temperature dependence was calculated using as a basis the Cooperative Interactions Theory (Bragg W. L., Williams E. J., Proc. Phys. Soc., 1934, A145, 699). In the 90-140°  
CARD: 1/2

COUNTRY : GDR B-4  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81025  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : temperature range good agreement between theoretical and empirical data was obtained. SM dependence on temperature, calculated on the basis of other assumptions did not agree with the empirical data.

-- A. Pomerantzev

CARD: 2/2

COUNTRY : GDR B-5  
CATEGORY : Physical Chemistry. Crystals.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81063  
AUTHOR : Lehman, Hans-Albert; Tiess, Detlef  
INST. : Not Given  
TITLE : Modification of  $\text{LiBO}_2$  with a Low Temperature Structure of  $\alpha$ -Cristobalite.  
ORIG. PUB. : Chem. Techn., 1959, 11, #5, 260.

ABSTRACT : Upon a stepwise thermal decomposition of  $\text{LiBO}_2 \cdot 8\text{H}_2\text{O}$ , at atmospheric pressure, 3 non-aqueous modifications ( $\alpha$ ,  $\beta$  and  $\gamma$ ) were obtained in addition to  $\text{LiBO}_2 \cdot 2\text{H}_2\text{O}$ .  $\beta$ -Phase, containing 0.35-0.05 moles of  $\text{H}_2\text{O}$  per 1 mole of  $\text{LiBO}_2$  exists in the temperature range of 200-350°. At 350-580° a metastable  $\beta$ -form was observed.  $\beta$ -form was easily transformed into a familiar  $\alpha$ -modification. Based on X-ray analysis, the structure of  $\beta$ -form of low temperature modification of ( $\alpha$ ) cristobalite consisting of B atoms tetrahedrally surrounded by O atoms was proposed. In  $\gamma$ -form

CARD: 1/2

COUNTRY : GDR B-5  
CATEGORY : Physical Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81064  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : an imperfect shell structure was attained, which could be compared with that of  $\text{B}_2\text{O}_3$  and cubic  $\text{HBO}_2$  ( $\gamma$ - $\text{HBO}_2$ ) structures. Chain structure is most probably characteristic of  $\alpha$ -form (similar to  $(\text{CaB}_2\text{O}_4)_n$  structure). Compounds  $\text{LiBO}_2 \cdot 8\text{H}_2\text{O}$  and  $\text{Li}(\text{Na})\text{BO}_2 \cdot 2\text{H}_2\text{O}$  should be considered as complex salts with  $\alpha$  structural formulae:  $\text{Li}(\text{H}_2\text{O})_6 \text{B}(\text{OH})_4$  and  $\text{Li}(\text{Na})\text{B}(\text{OH})_4$ , containing  $\text{B}(\text{OH})_4^-$  anion on the basis of their chemical and thermal behaviors and X-ray data.

-- E.G.

CARD: 2/2



COUNTRY : Rumania B-5  
CATEGORY : Physical Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81091  
AUTHOR : Motoc, C.  
INST. : Not given  
TITLE : Cohesive Energy of Silver

ORIG. PUB. : Studii si cercetari fiz. Acad. RPR, 1958, 9, #3, 379-387.  
ABSTRACT : Vigner-Seitz Method was employed for the calculation of cohesive energy of silver, while using Gaspar's Potential calculated by means of a statistical method (RZKhim., 1955, #11, 20543). Cohesive energy, calculated from the experimental value of the ionization potential was 19.5 K cal/mole. Using theoretically obtained (Gaspar's) value of the ionization potential the cohesion energy was found to be 59.9 K cal/mole. The difference between these two values is due to the fact that Gaspar's Universal potential does not take into account the interaction between electrons.

CARD:

1/1

-- D. Belashchenko

COUNTRY : GDR B-5  
CATEGORY : Physical Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81139

AUTHOR : Witzmann H.; Buhrow, J.  
INST. : Not Given  
TITLE : Report on Temperature Dependence of Glow Intensity of Inorganic Crystalline Luminophores.

ORIG. PUB. : Z. phys. chem. (D.DR), 1959, 210, #1-2, 97-101

ABSTRACT : Several empirical laws of the dependance of glow intensities of luminophores on temperature were described and analyzed. The following relationship was proposed for the core luminiscence in stationary conditions:  $I/I_0 = \exp(-W_1/kT) / [1 + C_2 \exp(-W_2/kT)]$ , where  $W_1 \ll W_2$  and  $I$  - glowing intensity at  $T$ ,  $I_0$  - maximum intensity,  $T$  - abs. temperature,  $k$  - Boltzman Constant,  $W_1, W_2$  - activation energies and  $C_2$  is a constant. This formula considers a possibility of coexistence of metastable state of the system with the activation energy  $W_1$ . Formulae proposed by other authors have been analyzed.

CARD:

1/1

7

-- V. I.

COUNTRY : Czechoslovakia B-5  
CATEGORY : Physical Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81146  
AUTHOR : Klikorka, Jiri; Machovec, Mojmir; Horak, Jaromir;  
INST. : Not Given  
TITLE : Zinc Selenide. I. Spectral Transmission of  
Thin Foils. Luminescence. II. The Character of Zinc Selenide Luminescence.  
ORIG. PUB. : Chem. listy, 1958, 52, #10, 1866-1871,  
1872-1876.  
ABSTRACT : I. The purest ZnSe (I) was obtained by a direct synthesis of Zn and Se in a quartz tube, at 650°C and  $2 \times 10^{-2}$  mm Hg of pressure. Subsequent distillation in H<sub>2</sub> atmosphere at 950°C yielded variously colored fractions containing different admixtures. The purest I was yellow and contained only traces of Cu and Fe. From this latter compound, at pressures of the order of  $10^{-6}$  mm were prepared 0.7-0.9  $\mu$  thick films. The dependence of transmissivity on the wave length in the latter films was studied.

CARD: 1/2

\* Celikovsky, Alex.

COUNTRY : GDR B-5  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81146

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : For the separate fractions of distilled I cathode luminescent intensity was studied and its dependence on wave length in the yellow and near red sections of the visible spectrum was determined. II. The relationship between the luminescent properties of ZnSe specimens and the duration of contact with different atmospheres (reducing, oxidizing, N<sub>2</sub>, vacuum) at various temperatures was studied. Possible disruption of the lattice was discussed. A conclusion was made that Se-vacancies in a cubic lattice of ZnSe are the centers of luminescence.

CARD:

2/2

-- A. Shteynberg



COUNTRY : GDR B-5  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81150  
AUTHOR : Wilke, K.-Th  
INST. : Not given  
TITLE : Aluminum-Lithium-Arsenate. Phosphorescent  
Nucleus of Arsenate.  
ORIG. PUB. : Z. phys. Chem. (DDR), 1959, 210, #5-6, 260-266.  
ABSTRACT : The method of preparation and luminiscent  
properties of Mn activated Al-Li-arsenate  
were described. A phosphorescent body  
possessing high radiation intensity (up to  
20% of Mg-Li-arsenate intensity) is of the  
following composition:  $6\text{Al}_2\text{O}_3 \cdot 6\text{LiO}_2 \cdot \text{As}_2\text{O}_5$   
( $10^{-2}$  Mn)I. This compound may be easily ex-  
cited by light of 365 m $\mu$  wave length. The  
light emission spectrum of I with Mn is com-  
posed of structural bands with the maxima oc-  
curring at 639, 645, 654, and 666 m $\mu$ . It  
was observed that the components of the  
phosphorescent substance form a chemical  
CARD: 1/2

COUNTRY : GDR B-5  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81150  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : compound, which fact was further proved by  
X-ray analysis. Increasing the time and tem-  
perature of calcining of the phosphorescent  
substance led to the decrease of glow in-  
tensity which was caused by the evaporiza-  
tion of As. It was established that only  
a part of Mn is in 4-valent state. The  
glow intensity of I falls sharply after a  
temperature of 200°C is reached. The simi-  
larity of radiation spectra of Mg-arsenate,  
Mg-Li-arsenate and Al-Li arsenate and the  
presence of polyvalent Mn in the above  
phosphorescent substances indicates the  
structural similarity of the configurations  
adjacent to Mn atom.  
CARD:

COUNTRY : GDR B-5  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81156  
AUTHOR : Peibst, H.; Lemke, H.  
INST. : Not given  
TITLE : Comparative Electrical and Optical Measurements of Natural Calcium Fluoride Crystals.  
ORIG. PUB. : Z. phys. Chem. (DDR), 1958, 208, #3-4, 188-209.  
ABSTRACT : The effects of temperature on the dark current, photocurrent, absorption spectrum thermoluminescent spectra (TL) and fluorescence (F) were studied. The curves of thermal luminescence of natural, variously colored fluorites, from seven German deposits were presented. Absorption spectra of all specimens show a maximum at 340 m $\mu$  and an elevation at ~~280 m $\mu$~~  280 m $\mu$ . Green coloration was connected with the maxima at about 590 and 410 m $\mu$ . TL and F spectra were sharply different. F spectrum consisted of one broad band with a maximum between 425-430 m $\mu$  for all samples.  
CARD: 1/3

COUNTRY : GDR B-5  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81156  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : TL spectrum varied for different specimens and consisted of a series of narrow bands lying between 385 and 645 m $\mu$ . It is assumed that the difference of TL and F spectra is caused by a difference in the nature of TL and F centers (TL centers are 3-valent ions while F centers consist of 2-valent ions of rare earth elements). Thermal glow curves (heating rate 0.35 deg./sec) display a single peak in the vicinity of 450-600°K for all specimens. The dependence of conductivity on temperature in the region of 450-600°K is for almost all specimens  
CARD: 2/3

COUNTRY : GDR B-5  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 81156  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : well approximated by a straight line with an inflection point in the coordinates of  $\ln \sigma \sim 1/T$ . The photoconductivity exceeds dark conductivity by 2-5%. Thermal activation energies of F-centers calculated (1) from the maximum in the absorption band (about 400 mμ), according to Pekar's theory, (2) from the slope of the lines  $\ln \sigma = f(1/T)$  and from the initial parts of the thermal incandescence curves, agree quite closely (about 2.4 ev).

CARD: 3/3

-- Kh. Kyaembre

COUNTRY : GDR B-5  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 81184  
 AUTHOR : Boer, K.W.; Kummel, U.; Ksoll, G.  
 INST. : Not given. CdS  
 TITLE : Dependence of Breakdown Voltage on Monocrystal Real Structure.  
 ORIG. PUB. : Z. phys. Chem. (DDR), 1959, 210, #3-4, 128-135.  
 ABSTRACT : It has been shown that upon heating of CdS monocrystal (at the rate of 0.5°/1 sec.) in vacuum ( $p < 10^{-5}$  mm of Hg) above a certain minimum temperature (200-280°) and upon a subsequent rapid cooling of it to -150° its voltage breakdown was considerably lowered (by about 2 orders). Analogous treatment in oxygen atmosphere (heating to 200° and higher) caused an increase in voltage breakdown. Upon an increase of the minimum temperature of the process, the voltage breakdown changed accordingly

CARD: 1/2

COUNTRY : GDR  
CATEGORY :

B-5

ABS. JOUR. : RZKhim., No. 23 1959, No. 81184

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : (increased upon heating in O<sub>2</sub> and decreased in vacuum) and approached the limiting values. The limiting values for both cases differ by a factor of about 50. Analyzing the temperature-electrical conductivity curves, it was concluded that the above methods of treatment cause changes in the structure of excited energy levels in the forbidden zone. These changes do not, however, substantially influence the magnitude of voltage breakdown.

-- L. Andreyev

CARD: 2/2

COUNTRY : POLAND  
CATEGORY :

B-5

ABS. JOUR. : RZKhim., No. 23 1959, No. 81188

AUTHOR : Stankowski, J.  
INST. : Not given  
TITLE : Non-Linear Effects in Rochelle Salt

ORIG. PUB. : Bull. Acad. polon. sci. Ser. sci. math., astron. et phys., 1958, 6, #9, 599-602.

ABSTRACT : The relationship between polarization (P) and electrical field potential (E) for the Rochelle salt was studied in the temperature interval of 17-35° by means of dielectric hysteresis (DH). It has been found that for strong fields and at temperatures exceeding Curie point, P is a non-linear function of E. At 24° DH is already absent, which fact does not agree with Kosman's Data. (R.ZhKhim 1957, #5, 12142). Kosman obtained DH at temperature greatly exceeding 24°.

CARD: 1/1

-- Yu. Vekilov

COUNTRY : Poland  
CATEGORY :

B-5

ABS. JOUR. : RZKhim., No. 23 1959, No.

81191

AUTHOR : Rutkowska, Halina

INST. : Not given

TITLE : Relationship between the Structure of  
Barium-Ferrite Magnets and their Properties.

ORIG. PUB. : Przegl. telekomun, 1958, 31, #8-9, 273-277.

ABSTRACT : The relationship between the properties and structure of barium ferrite magnets ( $BaO \cdot 6Fe_2O_3$ ) was studied.  $BaO \cdot 6Fe_2O_3$  structure was changed from fine to coarse grained by increasing the temperature of roasting from  $1050^\circ$  to  $1350^\circ$  or by increasing the time of reaction from 1/2 to 5 hours. Calcining of  $BaO \cdot 6Fe_2O_3$  specimens was accomplished in  $N_2$ ,  $O_2$ ,  $N_2 + O_2$  (1:1) or air atmospheres. No strict relationship between the magnetic properties and structure of  $BaO \cdot 6Fe_2O_3$  was apparent.

CARD: 1/1

-- O. Polotnyuk

COUNTRY : GDR  
CATEGORY :

B-5

ABS. JOUR. : RZKhim., No. 23 1959, No.

81192

AUTHOR : Tertsch, H.

INST. : Not given

TITLE : Crystal Growth

ORIG. PUB. : Tscherma's mineral. und petrogr. Mitt., 1959, 7, #1-2, 106-114.

ABSTRACT : A survey of papers dealing with the mechanism of growth of ideal and real crystals. Bibliography. 20 References.

-- Yu. K

CARD: 1/1

COUNTRY : Bulgaria  
CATEGORY :

B-5

ABS. JOUR. : RZKhim., No. 23 1959, No.

81194

AUTHOR : Kirkova, El.

INST. : Not given

TITLE : The Mechanism of (Methylene) Blue Incorporation into Lead and Barium Nitrate Crystals.

ORIG. PUB. : Godishnik Sofiysk Univ. Phys-mathem fac., 1956-1957 (1958), 51, #3, 39-46.

ABSTRACT : As a development of an earlier published work (RZKhim, 1958, #18, 60052) the supplementary experimental data useful in the explanation of the mechanism of methylene blue (I) incorporation into  $Pb(NO_3)_2$  and  $Ba(NO_3)_2$  crystals were published. Mechanisms of I's incorporation into the above crystals at various conditions of crystallization were studied. Quantitative incorporation data, as a function of I's concentration at 20° and at oversaturation (0.327) were obtained. I's adsorption isotherms on fine (0.075-0.3 mm) nitrile crystals were prepared. It was

CARD: 1/2

COUNTRY : Bulgaria  
CATEGORY :

B-5

ABS. JOUR. : RZKhim., No. 23 1959, No.

81194

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : concluded that I's incorporation into both  $Pb(NO_3)_2$  and  $Ba(NO_3)_2$  crystals follows the same mechanism, namely that of adsorption, considerably aided by the formation of molecular aggregates. Selective incorporation of I into cubes and pyramid face was observed only for  $Pb(NO_3)_2$ , while it was absent in the case of  $Ba(NO_3)_2$ . It was concluded that I did not attach itself to  $Pb(NO_3)_2$  crystals, when monomer predominated in the solution, and attached itself to  $Ba(NO_3)_2$  crystals when dimer was present in the solution.

CARD:

2/2

--Y. Slavnova

COUNTRY : Bulgaria  
CATEGORY :

B-5

ABS. JOUR. : RZKhim., No. 23 1959, No.

81195

AUTHOR : Kirkova, E.; Milev, M.

INST. : Not given.

TITLE : The Effect of Crystallization Conditions  
on the Incorporation of Certain Admixtures  
into Salt Crystals.

ORIG. PUB. : Godishnik Sofiysk univ. Phys.-mathem. fac.,  
1956-1957 (1958), 51, #3, 47-51.

ABSTRACT : In order to determine the crystallization  
procedure at which least amounts of non-  
isomorphic admixtures are incorporated into  
inorganic salt crystals the following systems  
were studied:  $Ba(NO_3)_2$ -methylene blue;  
 $Ba(NO_3)_2-K_4[Fe(CN)_6]$ ;  $KCl-PbCl_2$  and  $KClO_4-$   
 $BaSO_4$ . Quantitative data on the admixture  
incorporation at different crystallization  
temperatures and oversaturations were ob-  
tained. It was established that incorpora-  
tion of all studied admixtures depended to  
a large degree on crystallization conditions.

CARD: 1/2

COUNTRY : Bulgaria  
CATEGORY :

B-5

ABS. JOUR. : RZKhim., No. 23 1959, No.

81195

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : For the purest substances, crystallizations  
should be conducted possibly at higher tem-  
peratures and higher degrees of oversatura-  
tion.

--Y. Slavnova

CARD: 2/2

COUNTRY : Czechoslovakia B-6  
CATEGORY : Physical Chemistry. Gases. Liquids,  
Amorphous Substances.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81218  
AUTHOR : Papousek, Dusan  
INST. : Not given  
TITLE : A Study of Molecular Interaction in Liquids.  
IV. Association of Liquids.  
ORIG. PUB. : Chem. listy, 1958, 52, #10, 1845-1850.  
ABSTRACT : A method for the calculation of Energy of  
Association in Liquids, based on the empiri-  
cal relationship between the surface tension  
or compressibility and potential energy vol-  
ume density of the molecular interaction was  
proposed. The calculated values of associa-  
tion energy for several alcohols, ketones,  
nitriles and acids agreed well with those  
obtained by other methods. The obtained  
values of association energies of monoatomic  
aliphatic alcohols decreased with the in-  
crease of alkyl group size. Normal alcohols  
energies of association were higher than  
CARD: 1/2

COUNTRY : Czechoslovakia B-6  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81218  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : those of the corresponding isomers. In the  
case of methanol, one may expect a complete  
association in the liquid phase hence the  
calculated value of the energy of association  
should be similar to the energy of the cor-  
responding hydrogen bond. The calculated  
value of 6.27 K cal/mole agreed well  
with the commonly cited values for hydrogen  
bond energy in alcohols (6-6.2 K cal/mole).  
The deviation of calculated values from  
the true ones probably does not exceed  
0.2 K cal/mole. Article III, see RZKhim,  
1959, #10, 34101.  
CARD: 2/2

-- K. Mayer



COUNTRY : GDR B-6  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81231  
AUTHOR : Szabo, P.  
INST. : Not given.  
TITLE : Hard Paraffin Viscosity Measurements.

ORIG. PUB. : Kolloid-Zh, 1959, 163, #2, 141-142.

ABSTRACT : Hard paraffin was forced through a capillary viscosimeter at a pressure differential of 140 kg/cm<sup>2</sup>. The relative viscosity  $\eta_r$  was calculated with the aid of Poiseuille's formula.  $\eta_r$  decreases from  $3.7 \times 10^9$  poises at 26° to  $3.41 \times 10^9$  poises at 48.3°.

-- A. Lichter

CARD: 1/1

COUNTRY : Czechoslovakia B-6  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81237  
AUTHOR : Prokopova, H.; Vasko, A.  
INST. : Not given.  
TITLE : The Transmissivity of Arsenic Glass in the 15 $\mu$ -25 $\mu$  Range.

ORIG. PUB. : Czechosl. Phys. Zh, 1959, 9, #2, 270.

ABSTRACT : In the IR absorption spectra of arsenic glass (specimens were 0.98 mm thick), a transparency region with a maximum at 582 cm<sup>-1</sup> was found. The region terminates with a very intense absorption band, beyond which (<400 cm<sup>-1</sup>) possibly lies another transmitting region.

-- V. Kolesova

CARD: 1/1

COUNTRY : GDR B-7  
CATEGORY : Physical Chemistry. Radiochemistry.  
Isotopes.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81247  
AUTHOR : Schmidt-Ott, Wolf-Dieter  
INST. : Not given  
TITLE : Electron, Positron and  $\gamma$ -Spectra of  $\text{Cu}^{64}$ .  
ORIG. PUB. : Z. Phys., 1959, 154, #3, 286-292.  
ABSTRACT : The decay of  $\text{Cu}^{64}$  with  $T_{1/2} = 12.8$  hours was studied by means of a scintillating spectrometer. The threshold energies of  $\beta^-$  and  $\beta^+$  spectra were found to be  $580 \pm 17$  and  $665 \pm 20$  kev correspondingly. The decay chart of  $\text{Cu}^{64}$  was presented.

-- G. Sokolik

CARD: 1/1

COUNTRY : Hungary B-7  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81259  
AUTHOR : T. Szilagyí, Maria  
INST. : Not given  
TITLE : The Determination of Radioactive Isotope Purity by Means of Paper Chromatography and Electrophoresis.  
ORIG. PUB. : Magyar fiz. folyoirat, 1958, 6, #6, 565-572.  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : Czechoslovakia E-7  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81271  
AUTHOR : Drska, L.; Chudacek, I.; Sterba, F.  
INST. : Not given  
TITLE : Measurement of Some Neutron Spectra by  
Means of Nuclear Emulsions.  
ORIG. PUB. : Czechosl. Phys. Z., 1958, 8, #6, 648-657  
ABSTRACT : See R.ZKhim., 1959, #14, 48693.

CARD: 1/1

COUNTRY : Czechoslovakia B-8  
CATEGORY : Physical Chemistry. Thermodynamics.  
Thermochemistry. Equilibria. Phase \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81283  
AUTHOR : Seha, Z.; Holub, R.  
INST. : Not given  
TITLE : Contributions of a Harmonic Oscillator to  
the Thermodynamic Functions for One Degree  
of Freedom.  
ORIG. PUB. : Czechosl. Chem. Commun., 1959, 24, #3,  
991-1005  
ABSTRACT : See RZKhim., 1959, #16, 56329.

CARD: 1/1

\* Transitions. Physico-chemical Analysis.

COUNTRY : Czechoslovakia B-8  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81305  
AUTHOR : Seha, Z.  
INST. : Not given  
TITLE : Analytical Dependence of the Heat of Vaporization on Temperature  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24, #3, 869-873  
ABSTRACT : See RZKhim., 1959, #16, 56351

CARD: 1/1

COUNTRY : GDR B-8  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81335  
AUTHOR : Bittlich, H. J.; Leibnitz, E.  
INST. : Not given  
TITLE : Investigation of the System  $\text{Na}^+ - \text{Ca}^{2+} - \text{OH}^- - \text{SO}_4^{2-} - \text{H}_2\text{O}$ . III. The Ternary Systems.  
ORIG. PUB. : J. Prakt. Chem., 1959, 7, #5, 311-319.  
ABSTRACT : The solubility of identical salt vapor ions at 0°, 25, 35, 50 and 80° in ternary systems forming the quaternary system:  $\text{Na}^+ - \text{Ca}^{2+} - \text{OH}^- - \text{SO}_4^{2-} - \text{H}_2\text{O}$  was investigated. In  $\text{Na}^+ - \text{Ca}^{2+} - \text{SO}_4^{2-} - \text{H}_2\text{O}$  system at 25, 35 and 50° the minimum solubility of  $\text{CaSO}_4$  is observed at 0.2 M concentration of  $\text{Na}_2\text{SO}_4$  (Hill A.E., Wills J.H., J. Amer. Chem. Soc., 1938, 60, 1647). At 0°, hydrates such as  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$  and  $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$  are stable in the solid phase. The results of a study of the system  $\text{Na}^+ - \text{Ca}^{2+} - \text{OH}^- - \text{H}_2\text{O}$  agree with earlier obtained

CARD: 1/3

COUNTRY : GDR B-8  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81335  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : results (D'Anselme A., Bull Soc. chim. France, 1903, 29, 936; Basset H., Jr., J. Chem. Soc. [London], 1934, 1270). No anion complexes form in the system.  $\text{Ca(OH)}_2$  solubility in 2M is close to 0. The solubility of  $\text{Na}^+\text{-OH}^-\text{-SO}_4^{2-}\text{-H}_2\text{O}$ , at 50-80°, studied previously in the temperature range of 0-35° (Windmaisser F., Stöckl F., Montsh. Chem., 1950, 81, 543; Grube G., Z. Elektrochem. angew. physik. Chem., 1938, 44, 640) was explored presently. The experimental data of  $\text{Ca}^{2+}\text{-OH}^-\text{-SO}_4^{2-}\text{-H}_2\text{O}$  system were different

CARD:

2/3

COUNTRY : GDR B-8  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81335  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : from the literature data (Cameron F. K., Bell J. M., J. Amer. Chem. Soc., 1906, 28, 1220). No  $\text{Ca(OH)}_2$  solubility increase with the increase of  $\text{Ca}_2\text{SO}_4$  concentration nor any formation of the double salts was observed. For the latter system, double point concentrations, equilibrium constants and enthalpies were calculated. The calculated values agreed well with the experimental and literature cited ones. The composition of triple points in the system  $\text{Na}^+\text{-Ca}^{2+}\text{-OH}^-\text{-SO}_4^{2-}\text{-H}_2\text{O}$  and their position in Lovenherz and Enke diagrams were considered. Article II, see RZKhim, 1959, #11, 37845.

CARD:

COUNTRY : Rumania B-8  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81339  
AUTHOR : Angelescu, E.; Popescu, G.  
INST. : Not given  
TITLE : A Study of the System Glycerol-Diglycerol.

ORIG. PUB. : Studii si cercetari chim. Acad. RPR, 1958, 6, #4, 607-618.

ABSTRACT : Density  $d$  and viscosity  $\eta$  of glycerol (I) and diglycerol (II) mixtures in the temperature range of 20-80° were determined, taking the readings 50C apart. A negative deviation of  $d$  and  $\eta$  from additivity rule was observed. The magnitude of  $\eta$  deviation from the additivity rule decreased with the increase of temperature. Maximum deviations from the additivity rule occurred in the same regions of mixture's concentrations corresponding to 30 mole % of II, independently of temperature. At low temperatures the largest deviation of  $d$  from the additivity rule

CARD: 1/2

COUNTRY : Rumania B-8  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81339  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : occurred for the solutions containing 60 mole % of II.  $\eta$  variations in solutions of different concentrations were sufficiently great to permit the use of the above property for the analysis of the mixtures. The peculiarities of the system I-II, are explained by the fact that association and dissociation of the associated complexes occur simultaneously in the solution. The negative deviation of these properties from the additivity rule indicates the predominance of the dissociation process.

CARD: 2/2

-- V. Kogan

COUNTRY : GDR B-9  
CATEGORY : Physical Chemistry. Kinetics. Combustion.  
Explosions. Topochemistry. Catalysis.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81367  
AUTHOR : Chatterji, A.C.; Mukherjee, S. K.  
INST. : Not given.  
TITLE : Mechanism of Chromic Acid Oxidations. Part  
IX. Temperature Coefficients of Oxidation  
Rates of Ethylene and Methylated Ethylene \*  
ORIG. PUB. : Z. phys. Chem. (DDR), 1959, 210, #3-4,  
166-175.  
ABSTRACT : The kinetics of ethylene-(I), propylene-(II),  
2,3-butylene glycols (III) and pinacone (IV) oxi-  
dation with chromic acid were studied at a  
constant ion concentration, in the solution,  
in the presence of HClO<sub>4</sub>, at 25-50°C. The  
reaction rate increased from I<II<III<IV.  
The energies of activation increased from  
II<I<III, IV. The entropy of activation  
changes were the same as the variations of  
reaction rates. CH<sub>3</sub> groups increased the  
reaction rate due to their electron donor  
character. From I to IV the part played by

CARD: 1/2

\* Glycols by Chromic Acids

COUNTRY : GDR B-9  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81367  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : the rupture of O-H bond increased as com-  
pared with that of C-H bond. Apparently  
the glycols form ethers upon their reaction  
with the chromic acid. Part VIII, see  
RZKhim, 1959, #1, 457.

-- A. Revzin

CARD: 2/2

COUNTRY : GDR B-9  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 81370  
 AUTHOR : Seel, F.; Degener, E.; Knorre, H.  
 INST. : Not given.  
 TITLE : Stoichiometry and Kinetics of the Exchange  
 of Hydroxyl-amino-N-sulfonates with Hydrogen  
 Sulfide.  
 ORIG. PUB. : Z. anorg. und allgem. chem., 1959, 299,  
 #3-4, 122-137.  
 ABSTRACT : The kinetics of K-hydroxylamino-N-mono-(I)-or  
 disulfonates (II) reaction with  $\text{NaHSO}_3$  were  
 studied at 25-60° at solutions ionic  
 strength of 1.0, while varying the acidity and  
 concentration of reactants. The reaction  
 rate follows a second order equation and is  
 independent of acetate or sulfate buffer  
 concentration. For I and II the activation  
 energies were 24.5 and 18 Kcal/mole and  
 preexponents were  $12 \cdot 10^{15}$  and  $4.3 \cdot 10^{11}$ .  
 The reaction leads to the formation of 70%  
 of imidosulfonate or nitrido-trisulfonate  
 and 30% of amidosulfonate or imidosulfonate

CARD: 1/2

COUNTRY : GDR B-9  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 81370  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : from I or II correspondingly. This ratio  
 is independent of the temperature and  
 $\text{HSO}_3^-$  and  $\text{SO}_3^{2-}$  concentrations. The  
 authors believe that the reaction proceeds  
 via rate limiting formation of hydroxylamino-  
 6-sulfonates. The regrouping or hydrolysis  
 of the latter determines which of the two  
 courses the reaction takes.

-- A. Revzin

CARD: 2/2



COUNTRY : Czechoslovakia  
CATEGORY : B-9  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81371  
AUTHOR : Zahradnik, R.; Zuman, P.  
INST. : Not given  
TITLE : Carbamate, Monothiocarbaminates and Dithio-  
carbaminates. VIII. Polarographic Studies  
of the Kinetics and Mechanism of Dithio- \*  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959,  
24, #4, 1132-1145.  
ABSTRACT : See RZKhim, 1958, #23, 76707.

CARD: 1/1

\* carbaminic Acids Decomposition in the Acid  
Medium

COUNTRY : Czechoslovakia  
CATEGORY : B-9  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81409  
AUTHOR : Rozsival, M.; Bergstein, A.  
INST. : Not given.  
TITLE : Thermal Decomposition of  $MnCO_3$ .  
II. Electron Microscope Studies.  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959  
24, #4, 1195-1199  
ABSTRACT : See RZKhim, 1959, #10, 34011.

CARD: 1/1

COUNTRY : Czechoslovakia B-9  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81414  
AUTHOR : Brezina, B.  
INST. : Not given  
TITLE : A Study of the Reaction Between Equimolar  
Mixtures of Barium Carbonate and Different  
Varieties of Titanium Dioxides.  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959,  
24, #4, 1206-1233.  
ABSTRACT : See RZKhim, 1958, #11, 35468.

CARD: 1/1

COUNTRY : Czechoslovakia B-9  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81432  
AUTHOR : Landa, S.; Weissner, O.; Mostecký, J.  
INST. : Not given  
TITLE : Properties of Sulfide Catalysts. VI.  
Dehydrating and Dehydrogenating Properties  
of Molybdenum and Tungsten Disulfides.  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959,  
24, #4, 1036-1044.  
ABSTRACT : See RZKhim, 1959, #1, 513.

CARD: 1/1

COUNTRY : Czechoslovakia B-10  
CATEGORY : Physical Chemistry. Radiation Chemistry.  
Photochemistry. Theory of the Photographic \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81460  
AUTHOR : Bednar, J.  
INST. : Not given  
TITLE : Effect of Monovalent Thallium Ions on the  
X-Ray Reduction of  $\text{Fe}^{3+}$ .  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,  
#3, 1006-1007.  
ABSTRACT : See RZKhim, 1959, #5, 14716

CARD: 1/1

\* Process

COUNTRY :  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 1959, No.  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT :

CARD:

COUNTRY : Czechoslovakia B-10  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81461  
AUTHOR : Spurny, Z.  
INST. : Not Given  
TITLE : Variations of  $Fe^{2+}$  Concentration Upon the  
Irradiation of Its 4N Solution.  
ORIG. PUB. : Collect. Czechosl. Chem. Communs, 1959,  
24, #3, 1010-1011  
ABSTRACT : See RZKhim, 1959, #5, 14715.

CARD: 1/1

COUNTRY : Czechoslovakia B-11  
CATEGORY : Physical Chemistry. Theory of Acids and  
Bases.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81491  
AUTHOR : Fried, V.; Hala, E.; Pick, J.  
INST. : Not given.  
TITLE : Viscosity of the Nonelectrolytic Solutions.  
ORIG. PUB. : Collect. Czechosl. Chem. Communs, 1959,  
24, #2, 400-404.  
ABSTRACT : See RZKhim, 1959, #12, 41572.

CARD: 1/1

COUNTRY : HUNGARY B-12  
CATEGORY : Physical Chemistry. Electrochemistry.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81510  
AUTHOR : Suryanarayana, C.V.; Venkatesan, V. K.  
INST. : Not given  
TITLE : Electrical Conductance of Concentrated  
Solutions of Strong Electrolytes

ORIG. PUB. : Acta chim. Acad. scient. hung., 1958,  
17, #3, 327-352.

ABSTRACT : A new equation relating the electrical  
conductance  $\lambda_c$  in concentrated solutions  
of the strong electrolytes to the concen-  
tration was proposed:  $\lambda_c = \lambda_s + A(1 - C_p)/\eta_p$ ,  
where  $\lambda_c$  is specific conductance  $\times 1000/C_p$ ,  
 $C_p$  - mole ratio of the substance in the  
given solution to that present in the  
saturated solution at the same temperature.  
(concentration potential),  $\eta_p$  - ratio of  
given concentration viscosity to that  
in the saturated solution,  $\lambda_s - \lambda_c$  of the  
saturated solution and A - a function of  
temperature and dielectric constant of the

CARD: 1/2

COUNTRY : Hungary B-12  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81510  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : solution. The validity of the above  
equation was proved by the behavior of con-  
centrated aqueous solutions of NaCl, KCl,  
NaNO<sub>3</sub>, KNO<sub>3</sub> (from 1M to saturated solutions),  
at 30-55° (author's data), as well as by  
the behavior of aqueous solutions of  
NH<sub>4</sub>NO<sub>3</sub> (>4M), AgNO<sub>3</sub> and water-methanol  
solutions of LiNO<sub>3</sub> (literature data).

-- R. Lazorenko Manevich

CARD: 2/2

COUNTRY : GDR B-12  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81526  
AUTHOR : Milicka, L.  
INST. : Not Given  
TITLE : Electrostenolysis, Disturbance of Electrical  
Equilibrium and Ion Evolution on the Current  
Conducting Membranes.  
ORIG. PUB. : Z. phys. Chem. (DDR), 1959, 210, #1-2, 23-34.  
ABSTRACT : The essence of the phenomena of electro-  
stenolysis, disturbance of electrical equi-  
librium of the solution and ion evolution  
on the inorganic and organic membranes (or  
diaphragms), contained in the electrolytes  
through which DC current is passed, was  
discussed. The basic postulates of the  
previously proposed theory of the above  
phenomena, developed by the author were  
described (RZKhim, 1958, #9, 28126). The  
liberation of Ag from AgNO<sub>3</sub> solutions, I<sub>2</sub>  
from KI solutions, and H<sub>2</sub>SO<sub>4</sub> from K<sub>2</sub>SO<sub>4</sub>  
solutions on colloidal membranes, situated  
in the cells between the cathode and anode,  
CARD: 1/2

COUNTRY : GDR B-12  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81526  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : upon the passage of DC current through the  
solution was studied. Drawing of the equip-  
ment, in which one may (according to the  
author) observe the formation of I<sub>2</sub> from  
KI at the boundary of the two directly ad-  
jacent solutions of KI and KCl (without a  
membrane), upon the passage of the current  
through the cell, was shown. The results  
of the described experiments are considered  
as a proof of author's representation of  
the mechanism of electrostenolysis. Accord-  
ing to this idea, the membranes contained  
in the electrolyte, through which DC current  
passes, are considered as bipolar electrodes.  
CARD:

COUNTRY : Hungary B-12  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81529  
AUTHOR : Cseh, I.; Balog, J.; Kiss, L.; Paulik, I.  
INST. : Not given  
TITLE : Effect of the Temperature on Dissolution of  
Zinc in the Diluted Solutions of Acids.

ORIG. PUB. : Acta phys. et chem. Szeged, 1958, 4, #3-4,  
107-115.

ABSTRACT : The effect of temperature on the rate of  
dissolution of zinc-plates (RZKhim, 1958,  
#22, 73402; 1959, #5, 14778) in 0.001,  
0.005 and 0.0 N solutions of HCl, H<sub>2</sub>SO<sub>4</sub>  
and citric acid at 5, 15 and 25°C (stirring)  
was studied. The amounts of dissolved zinc  
were determined by polarographic means. The  
results were tabulated and plotted on graphs  
(amounts of dissolved zinc vs time). Zinc  
dissolution rate constants and the corres-  
ponding temperature coefficients were cal-  
culated.

CARD: 1/1

-- M. Pospelov

COUNTRY : Czechoslovakia B-12  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81546

AUTHOR : Weber, Jan  
INST. : Not given.  
TITLE : Polarographic Currents with Periodically  
Alternating Voltage. II. Theoretical  
Considerations of Current during Regeneration  
ORIG. PUB. : Chem. Listy, 1958, 52, #10, 1888-1898.

ABSTRACT : A derivation of instantaneous current  
equation for the electrode reaction, in which  
the depolarizer is chemically regenerated  
from the products of electrode reaction was  
presented. The calculations were performed  
for the depolarization process in the  
ideally reversible redox system using flat  
electrodes, stationary drop electrodes, and  
drop electrodes with surfaces growing upon  
an arbitrary periodic variation of voltage  
with the time. These general equations were  
adapted, also for the case of periodically

CARD: 1/2

\* of the Depolarizer by Means of Chemical  
Reaction in the Solution

COUNTRY : Czechoslovakia  
CATEGORY :

B-12

ABS. JOUR. : RZKhim., No. 23 1959, No.

81546

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : alternating voltage. Equations for the instantaneous current on flat and spherical electrodes as well as for steady state current were presented. In the case of stationary, spherical electrodes, the magnitude of the current on the stationary spherical electrode is independent of frequency of rectangularly applied voltage. This magnitude depends simply on the rate constant of the chemical reaction. Special cases, when a strong reducing or oxidizing agent is present in the solution were considered. Article I, see RZKhim, 1956, #21, 68014.

CARD:

2/2

-- P. Zuman

COUNTRY : Czechoslovakia  
CATEGORY :

B-12

ABS. JOUR. : RZKhim., No. 23 1959, No.

81548

AUTHOR : Vodehnal, Josef; Marhol, Milan  
INST. : Not given  
TITLE : Investigation of the Speed with which

Equilibrium is Attained during the Polarographic Exchange Reaction in Strongly Acid \*

ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24, #4, 1281-1286.

ABSTRACT : The rate of cation exchange in strongly acid cationites was investigated by polarographic means--automatic registration of  $Zn^{2+}$  wave height decrease. To that end was used a large polarographic vessel (about 400 ml), equipped with a stirrer, and a protected mercury drop electrode. In the case of rapid reactions the decrease of  $Zn^{2+}$  content in the solution was measured by the registration of wave height change vs time at constant voltage. Registration of total wave over longer periods of time was resorted to in the case of slow reactions.

CARD:

1/1

-- O. Knessl

Cationites

22



COUNTRY : Hungary B-12  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81555  
AUTHOR : Jambor, Bela  
INST. : Not given  
TITLE : Newest Investigations of the Polarography of  
Triphenyltetrazole Chloride  
ORIG. PUB. : Magyar tud. akad. Kem. tud. oszt. kozl.,  
1958, 10, #4, 409-416.  
ABSTRACT : Triphenylformazane (I) gives rise to an  
oxidizing anodic wave, independent of the  
impurities in the basic solution. I forms  
upon a cathodic reduction of triphenyl-  
tetrazole chloride (II). I's yield depends  
on the voltage, pH and the concentration of  
II. The observed 4-electron wave corres-  
ponds to the overlapping of several stages.  
Upon the reduction of II in acid medium, a  
colorless product different from I was ob-  
tained. The same product was observed on  
disproportionation of II, when irradiated  
with light. The type of relationship

CARD: 1/2

COUNTRY : Hungary B-12  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81555  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : ( $E_1$ , pH) for alcohol solutions is different  
from that for aqueous solutions. In order  
to make any conclusions from this relation-  
ship in regard to the proton participation  
in the electrode process of II reduction,  
caution must be exercised. See also RZKhim,  
1959, #1, 588.

-- S. Rosenfeld

CARD: 2/2

COUNTRY : Czechoslovakia B-13  
CATEGORY : Physical Chemistry. Surface Phenomena.  
Adsorption. Chromatography. Ion Exchange.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81577  
AUTHOR : Brodsky, Jan; Zmitko, Jiri  
INST. : Not given.  
TITLE : Treatment and Properties of Diatomaceous  
Earth, used as a Carrier in Gas or Liquid  
Chromatography.  
ORIG. PUB. : Chem. Listy, 1958, 52, #10, 2012-2013.  
ABSTRACT : The preparation of treated diatomaceous  
earth (I) (Kisselghur SK) used in gas  
chromatography was described. Technical  
grade diatomaceous earth was wetted with  
distilled water, dried, calcined for 1 hour  
at 500-550°, ground and classified. The  
wetability with liquids commonly used as a  
stationary phase was tested. It was found  
that up to 25% of liquid may be incorporated  
into I. The above method may be used to  
obtain I with any desired particle size.

CARD: 1/1

-- Karel Setinek

COUNTRY : Poland B-13  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81586  
AUTHOR : Blaszkowska, Zofia; Dybczynski, Rajmund  
INST. : Not given.  
TITLE : Characteristics and Evaluation of Strongly  
Alkaline Anionites. I. Methods of Evalua-  
tion of Ion Exchange Capacity.  
ORIG. PUB. : Przem. chem. 1959, 38, #3, 168-175.  
ABSTRACT : Four methods for the determination of ion  
exchange capacity of strongly alkaline  
anionites (An) were described. Two of them  
utilized column titration,  
and were based on the determination, upon  
filtration from 1 N, of the quantities  
of anions, desorbed from the layer of An,  
obtained from the reactions  $AnCl + NaOH \rightarrow$   
 $AnOH + Na_2CO_3 + H_2O$ . The remaining two  
methods were based on the potentiometric  
titration of OH-form with the An solution  
of HCl and Cl-form with a solution of

CARD: 1/2

COUNTRY : Poland B-13  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81586  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT :  $\text{AgNO}_3$ . The above methods were used to study the polyfunctionality of An. It was observed that weak alkali group content in "Amberlite IRA-400" and in "Levatite MN" did not exceed 5-10%. "Levatite MP" and "Vofatite L-160" contained more than 70% of such groups.

-- G. Yelkin

CARD: 2/2

COUNTRY :  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 1959, No.  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT :

CARD:

COUNTRY : GDR C  
CATEGORY : Inorganic Chemistry. Complex Compounds  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81629  
AUTHOR : Jander, G.; Swart, K.-H.  
INST. : -  
TITLE : Molten Antimony Trichloride as an Ionizing  
"Water-Like" Solvent

ORIG. PUB. : Z. anorgan. und allgem. Chem., 1959, 299,  
No 5-6, 252-270

ABSTRACT : Well-soluble in molten  $\text{SbCl}_3$  (I) are  $\text{MCl}$ ,  
where  $\text{M} = \text{K}, \text{Rb}, \text{Cs}, \text{NH}_4, \text{Tl}, \text{SbO}, [(\text{CH}_3)_4\text{N}]$   
(II),  $[(\text{C}_2\text{H}_5)_4\text{N}][(\text{C}_6\text{H}_5)_3\text{C}]$  (III) and  $[\text{C}_6\text{H}_5\text{-}$   
 $\text{NH}_3]$ , as well as  $\text{HgCl}_2, \text{AlCl}_3, \text{TeCl}_2, \text{SeCl}_2,$   
 $\text{CH}_3\text{COOK}, \text{Hg}(\text{CH}_3\text{COO})_2, \text{Sb}(\text{CH}_3\text{COO})_3$  (IV),  
 $[(\text{CH}_3)_4\text{N}]_2\text{SO}_4, \text{KF}, \text{SbF}_3, [(\text{CH}_3)_4\text{N}]\text{ClO}_4, \text{KBr},$   
 $\text{NH}_4\text{Br}, \text{HgBr}_2, \text{KI}, \text{HgI}_2, \text{I}_2, \text{Sb}_2\text{O}_3, \text{As}_2\text{S}_3$  and  
S. Difficultly soluble in I are  $\text{LiCl}, \text{NaCl},$   
 $\text{SnCl}_2, \text{FeCl}_3, \text{BiCl}_3$ ; insoluble are  $\text{CuCl},$

CARD: 1/7

COUNTRY : C  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81629

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT :  $\text{AgCl}, \text{MCl}_2$ , where  $\text{M} = \text{Ca}, \text{Sr}, \text{Ba}, \text{Zn}, \text{Cd}, \text{Pb},$   
cont'd  $\text{Mn}, \text{Co}, \text{Ni}$  and  $\text{Hg}_2$ ;  $\text{CrCl}_3, \text{M}_2\text{SO}_4$ , where  $\text{M} = \text{Na},$   
 $\text{K}$  and  $\text{NH}_4$ ,  $\text{MSO}_4$ , where  $\text{M} = \text{Mg}, \text{Ba}$  and  $\text{Zn}, \text{Sb}_2\text{-}$   
 $(\text{SO}_4)_3, \text{MS}$ , where  $\text{M} = \text{Zn}, \text{Cu}, \text{Hg}$  and  $\text{Pb}; \text{KClO}_4,$   
 $\text{KCN}, \text{K}_2\text{CrO}_4, \text{MO}$ , where  $\text{M} = \text{Mg}, \text{Ca}, \text{Zn}, \text{Mn}$  and  
 $\text{Pb}; \text{Al}_2\text{O}_3$  and  $\text{AgClO}_4$ . Under the action of I  
upon  $\text{MNO}_3$ , where  $\text{M} = \text{K}, \text{Na}$  and  $\text{Ag}$ , and  $\text{NaNO}_2$ ,  
the liberation of oxides of N takes place,

CARD: 2/7

COUNTRY :  
CATEGORY :

C

ABS. JOUR. : RZKhim., No. 23 1959, No. 81629

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and under action upon  $M_2CO_3$ , where  $M=K, Li,$   
cont'd and  $Na$ , and  $MCO_3$ , where  $M=Mg, Ba, Zn, Mn$  and  
 $Pb$ , the liberation of  $CO_2$  occurs;  $LiClO_4$  is  
also subject to decomposition. A survey of  
known solvates containing I is given; the  
following crystallosolvates were obtained:  
 $2[(CH_3)_4N]_2SO_4 \cdot 3I$ ,  $2[(CH_3)_4N][Sb(SO_4)_2] \cdot I$ ,  
 $KF \cdot 2I$ ,  $2TlCl \cdot I$ ,  $2KCl \cdot I$ ,  $2NH_4Cl \cdot I$  and  $SbOCl \cdot I$ ;  
the last 5 solvates were prepared by crystal-

CARD: 3/7

COUNTRY :  
CATEGORY :

C

ABS. JOUR. : RZKhim., No. 23 1959, No. 81629

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : lization of solutions of corresponding com-  
cont'd pounds in I, extraction of the excess of I  
in the Soxhlet apparatus by the action of  
 $CS_2$ , and drying of the product in vacuum over  
silica gel. There are also solvates well  
soluble in  $CS_2$ . Dissociation of I takes place  
according to the equation  $(x+1)SbCl_3 \rightleftharpoons$   
 $\rightleftharpoons SbCl_2^+ + Cl^- \cdot xSbCl_3$ ; the substances whose  
dissolution increases the concentrations of

CARD: 4/7

COUNTRY :  
CATEGORY : C

ABS. JOUR. : RZKhim., No.23 1959, No.81629

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the ions  $\text{SbCl}_2^+$  or  $\text{Cl}^-$ , are considered as  
cont'd analogs of acids and, correspondingly, of  
bases. The specific conductivity,  $\kappa$ , of I  
at  $98.5^\circ$  is of the order of  $10^{-6} \text{ ohm}^{-1}\text{cm}^{-1}$ ;  
for solutions in I,  $\kappa$  increases by many or-  
ders. The dependence of  $\kappa$  and mol. electro-  
conductivity of solutions in I on the con-  
centration was explored. From among  $\text{MCl}$ , the  
strongest "base" is II. The low  $\kappa$  of  $\text{SbOCl}$   
is ascribed to its considerable association

CARD: 5/7

COUNTRY :  
CATEGORY : C

ABS. JOUR. : RZKhim., No.23 1959, No.81629

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : in conc. solutions. The "acids" are (in the  
cont'd order of decrease of their acid properties):  
 $\text{AlCl}_3$ ,  $[\text{SbCl}_2]\text{ClO}_4$ ,  $\text{SeCl}_4$ ,  $\text{TeCl}_4$ ,  $\text{SbCl}_5$ , as  
well as  $\text{FeCl}_3$ . The van't Hoff coefficients  
of a series of substances dissolved in I at  
different concentrations were measured cryo-  
scopically. Completely dissociated at all  
concentrations were III ( $i=2$ ) and at  $c < 0.01$   
mole/l of II. For IV,  $i=3$ , although  $\kappa$  is

CARD: 6/7

COUNTRY :  
CATEGORY :

C

ABS. JOUR. : RZKhim., No.23 1959, No. 81629

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : very low. This is explained by the reaction  
cont'd  $IV + 2I \rightarrow 3SbCl_2(CH_3COO)$  (V) and by the small  
dissociation of V. It was demonstrated that  
I is a "water-like" solvent (Jander, G., Die  
Chemie in wasserähnlichen Lösungsmitteln.  
Berlin, 1949).-- I. Ryss

CARD: 7/7

COUNTRY : GDR  
CATEGORY : Inorganic Chemistry. Complex Compounds

C

ABS. JOUR. : RZKhim., No.23 1959, No. 81678

AUTHOR : Malik Wahid U.; Rahman S.M.Fazlur; Ali S.Anwar  
INST. : -  
TITLE : Studies on the Behavior of Cuprous Chloride  
in Hydrochloric Acid and Potassium Chloride  
Solutions. I. Chemical Analysis in the\*

ORIG. PUB. : Z. anorgan. und allgem. Chem., 1959, 299,  
No 5-6, 322-327

ABSTRACT : From the changes in the composition of solu-  
tions containing CuCl and HCl, diluted before  
the separation of CuCl deposit, the composi-  
tions of moist deposits were evaluated; in  
the authors' opinion, the obtained data point  
to the formation of  $H_2CuCl_3$  and  $H_3CuCl_4$  in the  
solution and in the deposit. By an analogous

\*Aqueous Phase

CARD: 1/2

COUNTRY :  
CATEGORY :

C

ABS. JOUR. : RZKhim., No.23 1959, No.81678

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : method, the system  $\text{CuCl-KCl-H}_2\text{O}$  was studied,  
cont'd in which  $\text{K}_3\text{CuCl}_4$  and  $\text{K}_2\text{CuCl}_3$  are formed in  
the solution and  $\text{KCuCl}_2$  and  $\text{K}_2\text{CuCl}_3$  in the  
deposit.-- I. Ryss

CARD: 2/2

COUNTRY : GDR  
CATEGORY : Inorganic Chemistry. Complex Compounds

C

ABS. JOUR. : RZKhim., No. 23 1959, No.81684

AUTHOR : Schäfer, H.; Dohmann, K.-D.  
INST. : -  
TITLE :

: On the Chemistry of the Elements Niobium and  
Tantalum. XX. On the Reaction  $11\text{Nb} + 3\text{SiO}_2 =$   
 $6\text{NbO} + \text{Nb}_5\text{Si}_3$

ORIG. PUB. : Z. anorgan. und allgem. Chem., 1959, 299,  
No 3-4, 197-202

ABSTRACT : Upon heating the powder of metallic Nb in a  
quartz ampoule during 4-10 days at  $800-1000^\circ$ ,  
a mixture of NbO and  $\text{Nb}_5\text{Si}_3$  is formed, iden-  
tified by chemical analysis and powdergrams  
[sic]. If, during heating, the ampoule is  
connected with the working diffusion pump,  
then the formation of silicide is not ob-  
served. The authors consider that the transfer  
of Si from the walls of the ampoule to the

CARD: 1/3



COUNTRY : C  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81684

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : weighed portion is brought about by the for-  
cont'd mation of gasiform SiO by means of the admix-  
ture of 0.002% H in metallic niobium accord-  
ing to the reaction:  $\text{SiO}_2(\text{solid}) + \text{H}_2 = \text{SiO}(\text{gas}) + \text{H}_2\text{O}$ . Then,  $\text{SiO}_2$ ,  $\text{H}_2\text{O}$  and Nb react to  
form  $\text{Nb}_5\text{Si}_3$ . The over-all equation of the  
reaction is:  $11\text{Nb} + 3\text{SiO}_2 = 6\text{NbO} + \text{Nb}_5\text{Si}_3$ ; the  
calculated enthalpy of the formation of  $\text{Nb}_5\text{Si}_3$   
is equal to  $\Delta H < -25$  kcal. Upon heating

CARD: 2/3

COUNTRY : C  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81684

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : metallic Ti in the quartz ampoule in the pre-  
cont'd sence of  $\text{TiCl}_3$  at  $1200^\circ$ , a transfer of the  
metal is observed, resulting from the reac-  
tion  $\text{Ti}(\text{solid}) + 2\text{TiCl}_3(\text{gas}) = 3\text{TiCl}_2(\text{gas})$ ,  
and on the walls a deposit of oxide and sili-  
cide of titanium is formed. Part XVIII, RZh-  
Khim., 1958, No 19, No 63668.-- I. Slonim

CARD: 3/3  
#1015

COUNTRY : HUNGARY D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81697  
AUTHOR : Kliburszky, B.  
INST. : Hungarian Academy of Sciences  
TITLE : Physical Basis for Evaluation of Geochemical Potentials  
ORIG. PUB. : Acta geol. Acad. scient. hung., 1958, 5, No 3-4, 313-321  
ABSTRACT : Two terms used in geochemistry, namely, "compound potential" of Szadeczky-Kardoss and "redox potential" of Goldschmidt, have been discussed. The existence of the first term is considered to be justified\*. Regarding the "redox potential," under complex geological conditions this concept becomes unreal to a certain extent, but may also be considered as justified since it reflects the relationship which existed in the surrounding  
\*since it has a definite meaning  
CARD: 1/2

COUNTRY : D  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81697  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : environment at the time of the formation of  
cont'd the rock and fixes the subsequent secondary processes.-- M. Berling  
CARD: 2/2

COUNTRY : HUNGARY D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR. : RZKhim., No.23 1959, No. 81698

AUTHOR : Grasselly, G.  
INST. : Hungarian Academy of Sciences  
TITLE : Variability of the Complex Anion Potential  
in Anisodesmic and Mesodesmic Structures

ORIG. PUB. : Acta geol. Acad. scient. hung., 1958, 5,  
No 3-4, 293-311

ABSTRACT : Complex anion potentials, even in the case  
of the same anion, cannot be considered as  
values having a stable character. In aniso-  
desmic structures, the variation of these  
values mainly depends upon possible changes  
in the ionic distances. From the point of  
view of evaluation of the potential of the  
connection or energy of the lattice, it is  
necessary to distinguish the physically con-  
sidered complex anions from the hard crys-

CARD: 1/2

COUNTRY :  
CATEGORY :

D

ABS. JOUR. : RZKhim., No.23 1959, No. 81698

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : talline lattice and anions interpreted  
cont'd only formally in terms of the geometry. In  
the silicates of mesodesmic structure, the  
complex anion potential changes together with  
variations of ionic distance, but the change  
of the former is most essential. From meso-  
silicates to tectosilicates, the values of  
complex anion potentials decrease in relation  
to structural type and degree of silification.  
-- N. Berling

CARD: 2/2

COUNTRY : HUNGARY D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR. : RZKhim., No. 23 1959, No. 81700

AUTHOR : Ovchinnikov, L. N.  
INST. : Hungarian Academy of Sciences  
TITLE : Experimental Study of the Processes of Ore  
Genesis

ORIG. PUB. : Acta geol. Acad. scient. hung., 1958, 5,  
No 3-4, 337-350

ABSTRACT : The significance of the filtration effect in  
the formation of ore deposits and its depen-  
dence upon the radii of hydrated ions is  
discussed. See also RZKhim., 1959, No 18,  
No 63982.-- R. Rafal'skiy

CARD: 1/1

COUNTRY : POLAND D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR. : RZKhim., No. 23 1959, No. 81707

AUTHOR : Osika, R.  
INST. : Polish Geological Institute  
TITLE : Deposits and Prospects of Search for Iron  
Ores in Poland

ORIG. PUB. : Biul. Inst. geol., 1958, No 126, 9-55

ABSTRACT : Three genetic types of deposits - sedimentary,  
erosion zone and magmatic - are described.  
The prospecting work conducted is based on  
geochemical and geophysical data.-- G. Vorob'-  
yev

CARD: 1/1

COUNTRY : HUNGARY D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR. : RZKhim., No.23 1959, No. 81710

AUTHOR : Cseh Nemeth, J.

INST. : -

TITLE : Facies of Manganese Ore Deposits in Urkuti

ORIG. PUB. : Foldt. kozlony, 1958, 88, No 4, 399-415

ABSTRACT : In the western part, the manganese deposits principally consist of the carbonates of Mn; in the eastern part, oxides of Mn predominate, and on the eastern border alluvial deposits are widespread. In the process of alteration of the rocks of the metal-bearing horizon, the carbonates of Mn were subjected to oxidation which was taking place at different speeds and was accompanied by the formation of different structures. As a re-

\*in the center and

CARD: 1/2

COUNTRY :  
CATEGORY :

D

ABS. JOUR. : RZKhim., No. 23 - 1959, No. 81710

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : sult of the translocation of a considerable  
cont'd part of the altered rocks, the following  
facies appeared: a) oxides of Mn on the site  
of the original formation; b) translocated  
oxides of Mn of clastic and clayey type; c)  
horizon of decomposed ore (silica fragments  
with brown and red clay); d) alluvial depo-  
sits from oxides of Mn. Numerous chemical  
analyses of ores are cited.-- R. Shereshev-  
skaya

CARD: 2/2

COUNTRY : BULGARIA D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR. : RZKhim., No. 23 1959, No. 81741

AUTHOR : Barska, S.  
INST. : Sofia University, Biological-Geological-  
TITLE : Vermiculite from Krumovograd \*

ORIG. PUB. : Godishnik Sofiysk. un-t. Biol.-geol.-geogr.  
fak., 1956-1957 (1958), 51, No 2, 133-140

ABSTRACT : Streaks of micaceous mineral, vermiculite, were  
discovered in an asbestos mine among acti-  
nolite and talcum. Chemical composition,  
according to three analyses, is (in %): SiO<sub>2</sub>  
33.17-52.83, TiO<sub>2</sub> 0.07-0.44, Al<sub>2</sub>O<sub>3</sub> 10.28-  
16.39, Fe<sub>2</sub>O<sub>3</sub> 3.84-11.81, FeO 0.67-1.50, MgO  
15.18-24.24, CaO 0.10-2.56, Na<sub>2</sub>O 0.38-0.64,  
K<sub>2</sub>O 0.06-0.72, H<sub>2</sub>O<sup>+</sup> 8.20-8.97, H<sub>2</sub>O<sup>-</sup> 8.59-

\*Geographical Faculty

CARD: 1/2

COUNTRY : D  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 81741

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 12.13. Crystallo-optical and thermal analyses  
cont'd were effected. The characteristics of the  
chemism of the mineral are discussed.-- G.  
Volkov

CARD: 2/2

COUNTRY : POLAND D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry  
ABS. JOUR. : RZKhim., No.23 1959, No. 81749  
AUTHOR : Wieser, T.  
INST. : -  
TITLE : Petrographical Characteristics of Albitophyre and Porphyries and of Diabase from Mrzyglod in Zawiercie Region  
ORIG. PUB. : Kwart. geol., 1957, 1, No 1, 113-125, 216  
ABSTRACT : According to the data of petrographical and chemical analyses, the igneous rocks revealed by boreholes were found to be greatly changed by the subsequent hydrothermal processes. Chemical changes were expressed by albitization, propylitization and calcitization.-- G. Vorob'yev

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81751  
AUTHOR : Grenar, A.  
INST. : Slovak Academy of Sciences  
TITLE : Mineralogical and Petrographical Study of Pegmatites in Krizenci and Its Nearest Surroundings (Czechoslovakia)  
ORIG. PUB. : Geol. prace. SAV. Zpravy, 1958, No 13, 74-96  
ABSTRACT : Various types of pegmatites differing in their structure, texture, mineralogical composition and certain geochemical characteristics were distinguished. A geochemical diagram for identifying minerals was compiled. The formation of pegmatites is considered from the point of view of theories set out in the works of A. A. Beus (see RZhGeo., 1955, No 3, No 2994). -- R. Khamel'nitskiy

CARD: 1/1

COUNTRY : GDR D  
 CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 81762  
 AUTHOR : Bautsch, H.-J.  
 INST. : -  
 TITLE : On the Genesis of Asbestos of Klettigshammer (Thüringen)  
 ORIG. PUB. : Geologie, 1959, 8, No 2, 149-158  
 ABSTRACT : Actinolite asbestos in paleopicroite is regarded as a product of regional metamorphism. The formation of actinolite was due to the action of magmatic intrusions, probably in the Sudeten phase of folding, and was accompanied by the loss of water. The preceding serpentinization completely encompassed olivine, preserving the relics of augite, whereas the formation of actinolite was brought about exclusively by physical and chemical

CARD: 1/3

COUNTRY : D  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 81762  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : causes, in the formation of asbestos, mechanical processes also took part. Magnetite always appears simultaneously with actinolite. The following variants of chemical reactions are possible: 1)  $10(\text{Ca, Mg, Fe})\text{SiO}_3 + 3(\text{Mg, Fe})_3\text{Si}_2\text{O}_5/(\text{OH})_4 - 4\text{H}_2\text{O} \rightarrow 2\text{Ca}_2(\text{Mg, Fe})_5\text{Si}_8\text{O}_{22}/(\text{OH})_2 + 5/3\text{Fe}_3\text{O}_4$ ; 2)  $4(\text{Ca, Mg, Fe})\text{SiO}_3 + 2(\text{Mg, Fe})_3\text{Si}_2\text{O}_5/(\text{OH})_4 - 3\text{H}_2\text{O} \rightarrow \text{Ca}_2(\text{Mg, Fe})_5\text{Si}_8\text{O}_{22}/(\text{OH})_2 + \text{Fe}_3\text{O}_4$ ; 3)  $2(\text{Ca, Mg, Fe})\text{SiO}_3 + 3(\text{Mg, Fe})_3\text{Si}_2\text{O}_5/(\text{OH})_4 - 3\text{H}_2\text{O} \rightarrow \text{Ca}_2(\text{Mg, Fe})_5\text{Si}_8\text{O}_{22}/(\text{OH})_2 + \text{Fe}_3\text{O}_4$   
 cont'd

CARD: 2/3



COUNTRY :  
CATEGORY :

D

ABS. JOUR. : RZKhim., No.23 1959, No. 81762

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT :  $\text{Fe}_3\text{Si}_2\text{O}_5/(\text{OH})_4 + \text{CaCO}_3 - 5\text{H}_2\text{O} \rightarrow \text{Ca}_2(\text{Mg}, \text{Fe})_5\text{Si}_8\text{O}_{22}/(\text{OH})_2 + 5/3\text{Fe}_3\text{O}_4 + \text{CO}_2^{-2}$ ; 4) 12(Mg,  $\text{Fe}_3\text{Si}_2\text{O}_5/(\text{OH})_4 + 6\text{CaCO}_3 - 21\text{H}_2\text{O} \rightarrow 3\text{Ca}_2(\text{Mg}, \text{Fe})_5\text{Si}_8\text{O}_{22}/(\text{OH})_2 + 7\text{Fe}_3\text{O}_4 + 6\text{CO}_2^{-2}$ .-- N. Berling

CARD: 3/3

COUNTRY : YUGOSLAVIA  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry

D

ABS. JOUR. : RZKhim., No. 23 1959, No. 81766

AUTHOR : Grafenauer, S.  
INST. : -  
TITLE : Lead-Zinc and Molybdenum Deposits in Mezica (Yugoslavia)

ORIG. PUB. : Rud.-metal. zb., 1958, No 3, 263-294

ABSTRACT : The above-named deposits are characterized by a uniform composition of ores and extremely low content of trace elements. The sulfides of Pb appeared later than the sulfides of Zn, chiefly in the second stage of mineralization, which followed after a considerable interval. The action of surface waters led to the formation of wulfenite. V was brought into the zone of oxidation exclusively by these waters. -- N. Berling

CARD: 1/1

COUNTRY : RUMANIA D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry  
ABS. JOUR. : RZKhim., No.23 1959, No. 81778  
AUTHOR : Maieru, O.  
INST. :  
TITLE : On the Process of Serpentine Erosion in the Danube Valley  
ORIG. PUB. : Rev. minelor, 1959, 10, No 1, 35-37  
ABSTRACT : The processes of erosion of the serpentine mountain range as a whole and in the intermediate stages of oxides, hydroxides and amorphous hydrosilicates of Ni were examined. The chemical analyses of 8 samples of serpentine rocks and 8 samples of garnierite are cited. Data concerning the extraction of hydroxides of Ni from rocks with acids are tabulated. A suggestion is made regarding the exploitation of a serpentine deposit with a view to the production of Ni, Co, Cu, Fe, Mg and coll. SiO<sub>2</sub>.--- E. Chepizhnaya  
CARD: 1/1

COUNTRY : BULGARIA D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81784  
AUTHOR : Atanasov, A. N.  
INST. : Sofia University, Biological-Geological-  
TITLE : Exogenous Galenite from Madzharovo Deposit  
ORIG. PUB. : Godishnik Sofiysk. un-t. Biol.-geol.-geogr. fak., 1956-1957 (1958), 51, No 2, 141-150  
ABSTRACT : The deposit is represented by a system of veins in vulcanogenic rocks. The veins are filled with quartz and barite with galenite, sphalerite, chalcopryrite and pyrites. The zone of oxidation and the zone of secondary sulfides are prominent. In the latter, coatings and overgrowths of galenite are noticed  
\*Geographical Faculty

CARD: 1/2

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZKhim., No.23 1959, No.81784

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : around crystals of sphalerite, the formation  
cont'd of which proceeded according to the following  
scheme:  $\text{PbSO}_4(\text{solution}) + \text{ZnS}(\text{solid}) = \text{PbS}(\text{solid}) + \text{ZnSO}_4(\text{solution})$ , under conditions  
of strong acid medium and small wateriness  
of rocks.-- G. Volkov

CARD: 2/2

COUNTRY : BULGARIA D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry

ABS. JOUR. : RZKhim., No.23 1959, No.81819

AUTHOR : Rozhdestvenski, A.  
INST. : Chemical Institute, Bulgarian AS  
TITLE : Composition of Basic Atmospheric Precipita-  
tions in the Region of the Black Sea Coast  
and Its Significance for Chemical Dynamics\*  
ORIG. PUB. : Izv. Khim. in-t, B"lg. AN, 1958, 6, 131-148

ABSTRACT : In order to study substances entering the  
sea, it is necessary to take into account  
the chemical composition of the atmospheric  
precipitations (rain, snow) because of the  
considerable part which they play in the  
water balance of the Black Sea. The data  
obtained showed that, on the average, minera-

\*of Sea Waters

CARD: 1/3

COUNTRY :  
CATEGORY :

D

ABS. JOUR. : RZKhim., No.23 1959, No. 81819

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : lization of the atmospheric precipitations  
cont'd on the seaside (in general 3 mg/l; rain 5,  
snow 2 mg/l) is slightly less than that of  
continental precipitations; the percentage  
of  $\text{HCO}_3^-$  in them is a little smaller and  
that of  $\text{Cl}^-$  is greater, but  $\text{HCO}_3^-$  still re-  
mains the principal ion. As to the content  
of biogenous elements, the atmospheric pre-  
cipitations differ little from river waters;  
at the same time, they have even more ammonia

CARD: 2/3

COUNTRY :  
CATEGORY :

D

ABS. JOUR. : RZKhim., No. 23 1959, No. 81819

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and less nitrates than the latter. A consi-  
cont'd derable amount of biogenous elements may  
also be supplied to the sea directly by  
dust. In view of the characteristic seasonal  
circulation of the air over the Black Sea,  
it is reasonable to expect that the distri-  
bution of the amounts of the substances pre-  
cipitated onto the surface of the sea should  
have different zonality depending on the  
season.-- V. Konshin

CARD: 3/3

COUNTRY : CZECHOSLOVAKIA D  
CATEGORY : Cosmochemistry. Geochemistry. Hydrochemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81825  
AUTHOR : Santholzer, V.; Podzimek, J.; Macku, J.  
INST. : -  
TITLE : Systematic Measurements of Radioactivity of  
Atmospheric Precipitations and Proof of Pre-  
sence of Artificial Radioactivity in the\*  
ORIG. PUB. : Ceskosl. casop. fys., 1958, 8, No 6, 716-721  
ABSTRACT : The measurement of the radioactivity of at-  
mospheric precipitations for the period from  
1956 to 1958 showed a sharp increase of ra-  
dioactivity in the middle and at the end of  
1957. The radioactivity of precipitations  
was mainly due to the presence of the product  
of disintegration of U<sup>235</sup> and Pu<sup>239</sup>. A de-  
\*Atmosphere

CARD: 1/2

COUNTRY : D  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 81825  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : crease of radioactivity with time, proved by  
cont'd the method of extrapolation, serves as a con-  
firmation of the surmise regarding the pre-  
sence of artificial radioactivity in the at-  
mosphere. The magnitude of this radioactivity  
constitutes  $10^{-10}$ - $10^{-9}$  curie per 1 liter of  
collected atmospheric precipitations.-- T.  
Levi

CARD:  
#1015

2/2

HUNGARY / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81877

Author : Nagy, Zoltan

Inst : Not given

Title : The Use of the Nomogram in Spectroscopic Analysis  
Employing the Method of Additives

Orig Pub : Magyar kem. lapja, 1958, 13, No 7-8, 303-305

Abstract : To facilitate the determination of the concentration of the desired substance by the method of additives the following formula is used:  
$$(1 + a_1/C)^B = 1 + a_2/C$$
 where  $B = (\Delta F_2 - \Delta F_0) / (\Delta F_1 - \Delta F_0)$ ,  $a_1$  and  $a_2$  are amounts of the added substance,  $C$  = concentration sought,  $F_0$  = difference in blackening of lines at the initial concentration,  $\Delta F_1$  and  $\Delta F_2$  = same upon addition of  $a_1$  and  $a_2$ . It is recommended that

Card 1/2

HUNGARY / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81877

one use the nomogram constructed as three vertical logarithmic straight lines; the logarithms  $\Delta F_1 - \Delta F_0$  and  $\Delta F_2 - \Delta F_0$  are plotted on the outer straight lines, and the concentration sought is read off the center straight lines (at the point of intersection of this line with the straight line connecting experimentally determined points). -- I. Krisztofori

Card 2/2

RUMANIA / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81880

Author : Pavlovskii, Gh.; Gruia, E.

Inst : Not given

Title : Electronometry as a Method of Analysis

Orig Pub : Rev. chim. (RPR), 1959, 10, No 3, 165-167

Abstract : An electrometric titration method is described, based on the dependence of the radiation process on the number of atoms participating in the photometric reaction as well as on the energy state of the optical (valence) electrons of these atoms. Gradual introduction into the photometric reaction of increasing quantities of atoms or molecules, which by interacting with excited atoms change the energy state of their optical electrons, permits the determination

Card 1/3

RUMANIA / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81880

of the concentration of the substance to be analyzed, the amount and the composition of the compounds obtained as a result of the interaction of the reactants, as well as the study of various biochemical processes in those cases where other methods are not acceptable. The curves obtained in the electrometric titration  $E - N$  (where  $E$  is the photometer reading,  $N$  is the number of ml of 0.1 mM titrant) have inflections at the equivalence points. Results of the electrometric titration of  $\text{CaCl}_2$  with  $\text{H}_3\text{PO}_4$ ,  $\text{H}_3\text{BO}_3$ , and  $\text{AlCl}_3$  solutions, as well as results of the titration of  $\text{CaSiO}_3$  with  $\text{AlCl}_3$  solution are given. In the last case, the existence

Card 2/3

RUMANIA / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81880

of four chemical compounds in the system Ca -  
SiO<sub>2</sub> - Al<sub>2</sub>O<sub>3</sub> has been determined. -- B. Manole

Card 3/3

POLAND / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81887

Author : Michalek, Wanda

Inst : Not given

Title : Analysis of Gases Formed During the Direct  
Synthesis of Methylchlorosilanes by the Method  
of Adsorption Chromatography

Orig Pub : Tworzywo guma lakiery, 1959, 4, No 1, 6-12

Abstract : A quantitative method for the analysis of gases  
given off (H<sub>2</sub>, CH<sub>3</sub>Cl, CH<sub>4</sub>, CO, N<sub>2</sub>) during the  
direct synthesis of methylchlorosilanes is  
described. The apparatus for analysis consists  
of four parts: an auxiliary (a cylinder with CO<sub>2</sub>  
used as carrier gas, regulators and a gas  
flowmeter), measuring (the measurement of the  
amount of the sample to be analyzed), an

Card 1/2



POLAND / Analytical Chemistry. General.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81887

adsorber (two chromatographic columns filled with activated charcoal), and a detector (an azotometer filled with 50% KOH solution). The measured sample of the gas mixture to be analyzed is introduced into the apparatus, previously passing CO<sub>2</sub> through it (to remove air); the sample by means of the carrier gas is passed through the chromatographic columns where the gas separation occurs. The individual mixture components coming from the columns are passed into the azotometer where their volumes are measured. The analysis duration depends on the gas composition and varies from 10 minutes to one hour. -- A. Nemodruk

Card 2/2

HUNGARY / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81904

Author : Molnar, F.; Toth, Gy.

Inst : Not given

Title : Anion Exchange Separation of Thorium, Zirconium, and Niobium in Sulfuric Acid Medium

Orig Pub : Acta chim. Acad. scient. hung., 1959, 19, No 1, 75-81

Abstract : See RZ Khim, No 8, 1959, No. 26997

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81921

Author : Kvapil, Jan

Inst : Not given

Title : Determination of Potassium with Sodium  
Tetraphenyl Borate in the Quality Control of  
the Production of Potash

Orig Pub : Kvasny prumysl, 1958, 4, No 4, 87

Abstract : For the determination of K in the quality control of the production of potash, the use of sodium tetraphenyl borate is recommended. The sample is evaporated with conc. HCl and HNO<sub>3</sub> (to remove ammonium salts); the residue is dissolved in water; the solution (30-40 mg K) is acidified, using methyl orange as indicator; it is heated to 60-70°, and 25 ml 2% solution

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81921

of sodium tetraphenyl borate is added while stirring. Upon cooling, the residue is filtered off, washed three times on a filter with a saturated solution of sodium tetraphenyl borate, dried for one hour at 105° and weighed.  
-- T. Zvarova

Card 2/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81925

Author : Vesely, Miroslav; Sulcek, Zdenek

Inst : Not given

Title : Rapid Methods for the Analysis of Metals and Mineral Raw Materials. VI. Photometric Determination of Copper in Natural Carbonates

Orig Pub : Chem. listy, 1958, 52, No 10, 2010-2012;  
Collect. Czechosl. Chem. Commun., 1959, 24,  
No 6, 2052-2055

Abstract : A highly selective reagent "tetraethylthiura-  
mdisulfide" (I) was applied to the determination  
of Cu in limestones. Beer's law is obeyed  
at  $\text{Cu}^{+2}$  concentration of 5-70  $\mu\text{g}$  per 50 ml. In  
the presence of 20%  $\text{C}_2\text{H}_5\text{OH}$ , (I) begins to  
separate from the solution; upon further increase

Card 1/4

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81925

in  $\text{C}_2\text{H}_5\text{OH}$  concentration the separation of (I)  
ceases; optimum  $\text{C}_2\text{H}_5\text{OH}$  concentration is 60%.  
The determination of Cu in the presence of Fe  
is impossible in  $\text{HCl}$ ,  $\text{HNO}_3$ , and  $\text{H}_2\text{SO}_4$  media;  
reproducible results are obtained in the  
presence of  $\text{HClO}_4$  and  $\text{H}_3\text{PO}_4$ , in which case the  
accuracy of the Cu determination is satis-  
factory even at an excess of Fe of 13,000 times.  
In the medium of 1 ml  $\text{HClO}_4$ , 3 ml  $\text{H}_3\text{PO}_4$ , and  
1.6 g  $\text{Ca}(\text{NO}_3)_2$  (per 50 ml) containing 30  $\mu\text{g}$   
Cu, it is possible to mask up to 100 ml [sic]  
 $\text{Fe}_2\text{O}_3$ . For the determination of Cu, 5 g of  
limestone is dissolved in the required amount  
of concentration  $\text{HNO}_3$  (in the final solution  
50 ml should contain 2 ml concentrated  $\text{HNO}_3$ ),  
the solution is boiled, diluted with water

Card 2/4

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81925

to 25-100 ml, and shaken; to 10 ml of filtrate 3 ml 85%  $H_3PO_4$ , 1 ml 70%  $HClO_4$ , 30 ml 96%  $C_2H_5OH$ , and 3 ml 0.01 M solution of (I) are added; this is stirred, diluted with water to 50 ml, allowed to stand for 30 minutes and the optical density of the solution measured with a purple light filter, Ilford No. 601, using for comparison the solution prepared from an aliquot portion of the solution of limestone to be analyzed without adding (I). With the sample weight of 2 g (in 50 ml), the sensitivity of the method is  $>0.0005\%$ ; the relative error of one determination,  $\pm 1.3\%$ . The method is useful for the analysis of limestone with traces of Cu as well as the analysis of mineralogically separated calcites, ankerites

Card 3/4

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81925

and limestones which are used in the rubber industry. For Communication V see RZ Khim, No 23, 1958, No. 77339. -- Jiri Vanecek

Card 4/4

RUMANIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81928

Author : Spacu, P.; Pirtea, Th. I.

Inst : Not given

Title : Potentiometric Determination of Silver in the Presence of Other Elements

Orig Pub : An. Univ. "C. I. Parhon". Ser. stiint. natur., 1958, No 20, 55-58

Abstract : It has been determined that the method previously developed by the authors for the determination of  $\text{Ag}^+$  by the potentiometric titration with sodium nitroprusside solution (RZ Khim, No 8, 1958, No. 24742) is also applicable when  $\text{Tl}^+$  and most elements that are found with Ag in alloys and ores (Pb, Cd, Zn, Cu, Co, Ni, Mn, Sb) are present in the solution. The solution

Card 1/2

RUMANIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81928

to be analyzed containing  $\text{AgNO}_3$  and 0.01-0.2 g of each of the salts of the above metals (anions:  $\text{NO}_3^-$ ,  $\text{SO}_4^{2-}$ ,  $\text{CH}_3\text{COO}^-$ , and  $\text{C}_4\text{H}_4\text{O}_6^{2-}$ ) is diluted with water to 125-150 ml, 7-8 g  $\text{NaNO}_3$  and 0.8-1.5 g Complexone III are added, and this is titrated with 0.1 N solution of Na nitroprusside at 380 mv. The error in the determination of Ag is 3%. -- B. Manole

Card 2/2

HUNGARY / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81935

Author : Dzubay, Miklos

Inst : Not given

Title : Flame Photometric Determination of Small  
Amounts of Barium

Orig Pub : Magyar kem. folyoirat, 1958, 64, No 12, 483-484

Abstract : 0.001-0.01 M concentrations of barium are determined at 770 mμ in the acetylene air flame, using Zeiss photometer with the light filter K77. The calibration curve for the concentration interval of 14-110 mg of Ba per 100 ml is a straight line; the error in the determination of Ba in uncontaminated solutions varies from -4.4 to +1.5%. The determination of Ba is possible in the presence

Card 1/2

HUNGARY / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81935

of large amounts of Ca; the presence of Mg leads to high results. -- N. Poleuktov

Card 2/2

HUNGARY / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81947  
Author : Sommer, L.  
Inst : Not given  
Title : A Spectrophotometric Study of an Inner Complex  
of Titanium with Chromotropic Acid in Solution  
Orig Pub : Acta chim. Acad. scient. hung., 1959, 18, No 1-4,  
121-127  
Abstract : See RZ Khim, 1959, No 8, No. 27043; No 9,  
No. 31000

Card 1/1

CHINA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81951  
Author : Chiang Jih-huei  
Inst : Not given  
Title : Colorimetric Determination of Micro Quantities  
of Vanadium in Tungsten Ores  
Orig Pub : Dizhi yu kantan, 1958, No 24, 21-23  
Abstract : A simple and rapid method for the determination  
of  $V_2O_5$ , based on the oxidation of  $V^{+4}$  to  $V^{+5}$   
with  $Fe^{+3}$  and the colorimetric determination  
of the equivalent quantity of  $Fe^{+2}$  formed by  
means of  $\alpha, \alpha'$ -dipyridyl, is described.  $Cu^{+2}$   
and  $Al^{+3}$ , which interfere, are removed from  
the solution by adding  $Na_2S$  and  $NH_4Cl$ ,  
respectively.  $WO_3$ ,  $MoO_4^{-2}$ ,  $MnO_4^{-}$ ,  $CrO_4^{-2}$ ,  
 $Fe^{+3}$ ,  $Pb^{+2}$ ,  $Zn^{+2}$ ,  $Sn^{+4}$ ,  $Ti^{+4}$ , and other ions

Card 1/3

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81951

do not interfere. The sample (0.5 g) is fused in an iron crucible with 3.5 g  $\text{Na}_2\text{O}_2$ ; the melt is leached out with hot water, 2-3 drops of 3%  $\text{H}_2\text{O}_2$  are added, and the solution is boiled carefully for 1 minute; upon the appearance of a bluish-green color in the solution, indicating the presence of  $\text{CuO}_2^{-2}$ , 5-10 drops of  $\text{Na}_2\text{S}$  solution are added, and the solution is boiled for 1 minute with stirring. The resulting solution after cooling is diluted with water to 100 ml, stirred and rapidly filtered through a dry filter into a dry flask. To 5-10 ml of the filtrate, 0.5-1 g  $\text{NH}_4\text{Cl}$  is added; this is filtered into a colorimetric cell having a 25 ml volume; the precipitate is washed until the total volume of the filtrate is 15 ml, 4 ml

Card 2/3

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81951

$\text{HCl}$  (1 : 1) and 2 ml 8%  $\text{NaNO}_2$  solution are added, allowed to stand for 15 minutes; 1 g of urea (to remove excess  $\text{NaNO}_2$ ) is added, allowed to stand for 15 minutes; 1 ml 0.25% aqueous solution of 2,2'-dipyridyl, 1 ml  $\text{Fe}^{+3}$  (120 or 240  $\gamma$   $\text{Fe}^{+3}$ ) solution, 1.5 ml concentrated  $\text{NH}_4\text{OH}$  (to pH 3-9) are added, diluted with water to the mark, stirred, allowed to stand for 15 minutes, and the optical density is measured. The concentration to be determined is 0.0002-1%  $\text{V}_2\text{O}_5$ . Light absorption of the colored solution is constant at pH 3-9. --  
A. Petrenko

Card 3/3



CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81954

Author : Habrcetl, Miloslav

Inst : Not given

Title : Polarographic Determination of Molybdenum in Steel

Orig Pub : Hutn. listy, 1959, 14, No 4, 324-325

Abstract : A method for the determination of Mo in carbon steels as well as in low- and medium-alloy steels (containing < 0.30 Cu), based on the polarography of Mo in  $\text{CH}_3\text{COONH}_4$  medium at pH of 4.5, is described. The sample (1 g) is dissolved in 20 ml  $\text{HNO}_3$  (1 : 1), evaporated to dryness; the residue is evaporated with 10 ml concentrated HCl, 25 ml water, and 20 ml concentrated  $\text{NH}_4\text{OH}$  are added, diluted with

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81954

water to 100 ml and filtered (to remove  $\text{Fe}(\text{OH})_3$ ). To 50 ml of filtrate, containing  $\text{MoO}_4^{2-}$ ,  $\text{WO}_4^{2-}$ ,  $\text{Cu}^{+2}$ ,  $\text{Ni}^{+2}$ , and  $\text{Co}^{+2}$ , 5.5 ml glacial  $\text{CH}_3\text{COOH}$ , 3.7 g Complexone III and 2 ml 0.5% gelatin solution are added, diluted with water to 100 ml, and the polarogram is obtained upon passing  $\text{N}_2$ . For the analysis of steel containing Al, the sample is dissolved in 20 ml concentrated HCl,  $\text{Fe}^{+2}$  is oxidized by adding 2 ml  $\text{HNO}_3$ ; the solution is evaporated to dryness; the residue is dissolved in 10 ml HCl, and the analysis continued as shown above. -- N. N. Turkevich

Card 2/2

RUMANIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960  
Author : Spacu, P.; Radulescu, Elena; Vasilescu, Claudia;  
Balanel, Elena  
Inst : Not given  
Title : Separation and Determination of Manganese in  
Ferromanganese  
Orig Pub : An. Univ. "C. I. Parhon", Ser. stiint. natur.,  
1958, No 20, 69-77

Abstract : Two methods were applied with improvements to  
the determination of Mn in ferromanganese  
under factory conditions: complexometric method  
(Pribil, R.; Horacek; Z. anal. Chem., 132,  
140 (1951)) and ion-exchange method (RZ Khim,  
No 6, 1955, No. 9697). In the 1st method the  
sample to be analyzed, containing 30-150 mg

Card 1/4

RUMANIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960

Mn, is treated with a concentrated  $\text{HNO}_3$   
solution, neutralized with a NaOH solution  
until the appearance of weak opalescence;  
25-30 ml 7% Complexone III solution (I), and  
10 ml glacial  $\text{CH}_3\text{COOH}$  containing 1 g  $\text{Ca}(\text{CH}_3\text{COO})_2$   
(to form a buffer) are added; 1 g  $\text{PbO}_2$  (to  
oxidize  $\text{Mn}^{+2}$  to  $\text{Mn}^{+3}$ ) is introduced; this is  
stirred (1.5 min.), filtered under vacuum,  
and the residue (excess  $\text{PbO}_2$ ) washed with  
water; the filtrate, containing all of Mn  
in the form of a Mn (III) complex, is  
titrated with 0.1 M solution of Mohr's salt.  
To prevent the decomposition of the Mn (III)  
complex, the analysis (after the addition of  
 $\text{PbO}_2$ ) should be conducted rapidly, ( $\leq 5$  min.).  
The error of the method is  $\pm 0.5\%$ . In the 2nd

Card 2/4

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960

method the cation exchange resin Amberlite 1R-120 is used; 20% HCl solution (150 ml) is used for the elution of Mn. The resulting solution is neutralized with a concentrated  $\text{NH}_4\text{OH}$  solution, and Mn is determined by an indirect titration: an excess of 0.1 N solution of I [means (I)], 8-10 ml buffer solution (350 ml  $\text{NH}_4\text{OH}$  + 54 g  $\text{NH}_4\text{Cl}$ ) are added, and the excess of (I) is back-titrated with 0.1 N.  $\text{ZnSO}_4$  solution, using Eriochrome Black T as indicator. It was determined that the use of NaOH or KOH (instead of  $\text{NH}_4\text{OH}$ ) for the neutralization causes high results in the determination of Mn. This method is two times more accurate than the first one, but is more time-consuming; it is also necessary to separate

Card 3/4

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960

$\text{SiO}_2$  previously. After the separation of Mn, Fe in the solution is determined by a titration with permanganate (after reducing  $\text{Fe}^{+3}$  to  $\text{Fe}^{+2}$  with electrolytic Cd). -- B. Manole

Card 4/4

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81970

Author : Matrka, Miroslav; Navratil, František

Inst : Not given

Title : Photometric Determination of Nitrite with  
N,N'-Tetramethylbenzidine

Orig Pub : Chem. prumysl, 1959, 9, No 2, 75-77

Abstract : A new method for the photometric determination of  $\text{NO}_2^-$  ions was developed, based on the oxidation by  $\text{NO}_2^-$  ions of N,N'-tetramethylbenzidine to orange-colored diphenoquinone (absorption maximum at 475 mμ), containing the cation  $(\text{CH}_3)_2\text{N}^+ = \text{C}_6\text{H}_4 = \text{C}_6\text{H}_4 = \text{N}^+(\text{CH}_3)_2$ . To 1 ml 0.1% solution of N,N'-tetramethylbenzidine in 1 N. HCl, 9 ml 1 N. HCl and 0.5-3 ml  $\text{NaNO}_2$  solution to be analyzed

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81970

(~0.01 g  $\text{NaNO}_2$  in 1 liter) are added, allowed to stand for 15 min., diluted with water to 100 ml, and the optical density of the solution is measured at ~500 mμ (bluish-green light filter) after 3 hours, using "3.5" [sic] cells. Beer's law is obeyed at  $\text{NO}_2^-$  concentrations <30 g/ml. Oxidizing agents ( $\text{CrO}_4^{2-}$ ,  $\text{MnO}_4^-$ ,  $\text{Ce}^{+4}$ ) and reducing agents ( $\text{SO}_3^{2-}$ ,  $\text{S}_2\text{O}_4^{2-}$ ) interfere. -- N. Turkevich

Card 2/2

HUNGARY / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81974

Author : Fodor, J.

Inst : Not given

Title : Rapid Determination of the Phosphorus Content  
in Steel During Manufacture Using the Isotope  
Dilution Method

Orig Pub : Acta chim. Acad. scient. hung., 1959, 19, No 1,  
13-21

Abstract : No abstract given

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81975

Author : Flum, Zdenek

Inst : Not given

Title : Photometric Determination of Phosphorus in the  
Ashes of Solid Fuel

Orig Pub : Paliva, 1959, 39, No 4, 126-129

Abstract : The sample of ashes to be analyzed (0.05-0.1 g)  
is evaporated in a Pt crucible two times with  
2 ml concentrated  $\text{HNO}_3$  and 1 ml HF. The residue  
is evaporated again to dryness with 1 ml  
concentrated  $\text{HNO}_3$  and dissolved in 5 ml 20%  
 $\text{H}_2\text{SO}_4$  with boiling for 5 minutes. The solution  
is filtered, 2 ml 4%  $\text{Na}_2\text{S}_2\text{O}_5$  (to reduce  $\text{Fe}^{+3}$ )  
is added; this is boiled (to remove  $\text{SO}_2$ ) and  
diluted with water to 100 ml. To 20 ml of the

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81975

resulting solution, 10 ml 20%  $H_2SO_4$ , 35 ml water and 10 ml 5% ammonium molybdate in 10%  $H_2SO_4$  are added, 2 ml freshly prepared  $SnCl_2$  solution (0.5 g  $SnCl_2 \cdot 2H_2O$  in 0.5%  $HCl$ ) is introduced; this is diluted with water to 100 ml, and the optical density of the solution is measured after 15 minutes, using 2.006-cm cells and the red light filter. Beer's law is obeyed at concentrations of P of 4-64  $\mu$ /ml. The reproducibility of the results of the analysis at <0.1%  $P_2O_5$  is 4.8%; at somewhat higher P contents, it reaches 1.3%. Small quantities of As and  $NO_3^-$  do not interfere with the determination of P. -- N. N. Turkevich

Card 2/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81979

Author : Kopa, Lubos  
Inst : Not given  
Title : Determination of Oxygen Content in Aluminum by the Vacuum Fusion Method

Orig Pub : Hutn. listy, 1959, 14, No 4, 322-324

Abstract : A modification of the Sloman method (Sloman, J. Instit. Metals 71, 391 (1945)) for the determination of O combined with aluminum as  $Al_2O_3$  is described. Upon heating with graphite in the oven of the vacuum extraction apparatus, Al carbide and CO are formed; CO is determined in the Orsat analyzer. 16-20 g of copper (to prevent the distillation of Al) is placed in a graphite crucible (diameter 20 mm, height

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81979

50 mm), which is placed in a quartz crucible (diameter 33 mm, height 100 mm), sprinkled with powdered graphite and connected to a quartz tube and a 2-stage diffusion pump; this is heated to 1250° for 15-30 min. The temperature is then lowered to 1050°, a 1.5-2 g sample is added, and after 10 minutes the temperature is raised to 1550°. The evolution of CO is complete within 20-30 minutes. In the control experiment, CO is formed for 30 minutes, the quantity being >0.01 ml. The determination error is 0.0010-0.0057%. --  
N. N. Turkevich

Card 2/2

RUMANIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81981

Author : Trandafirescu, E.; Iordachescu, Jeana;  
Diaconescu, Georgeta; Florescu, Creanga Silvia

Inst : Not given

Title : The Mechanism of Oxidation-Reduction Reactions.  
The Detection of Small Quantities of Selenium  
and Tellurium in the Presence of Arsenic

Orig Pub : Farmaica (RPR) 1959, 7, No 2, 135-141

Abstract : On the basis of measurements of normal oxidation-reduction potentials ( $E_0$ ) of the systems  $\text{SeO}_3^{2-}/\text{Se}$  and  $\text{TeO}_3^{2-}/\text{Te}$ , as a function of the pH of the medium, conditions were determined which permit the detection of Se and Te present simultaneously in the solution as  $\text{H}_2\text{SeO}_3$  and  $\text{H}_2\text{TeO}_3$ . At pH=0, the rate of the  $\text{SeO}_3^{2-}$

Card 1/3

RUMANIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81981

reduction ( $E_0=0.76v$ ) with  $SnCl_2$  ( $Sn^{+4}/Sn^{+2}$   $E_0=0.3$  volts) is large, and elemental Se separates as a red-orange powder, while  $TeO_3^{-2}$  ( $E_0=0.305$  volts) is practically not reduced by  $SnCl_2$  even when a large excess of  $SnCl_2$  is present and the solution is heated. In an alkaline medium ( $pH=14$ ), the difference between  $E_0$  values for  $SeO_3^{-2}$  and  $TeO_3^{-2}$  is small ( $\approx 0.1$  volts), and both metals are reduced very rapidly with  $SnCl_2$  ( $E_0=0.85$  volts). In this case, Te and Se separate as black powders; however, Se has a greyish-violet coloration and represents the allotropic form which contains  $OH^-$ . Upon drying, Se precipitate regains the red-orange color, while the Te precipitate remains black. For the detection of Se and Te,

Card 2/3

RUMANIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81981

one drop of the solution to be analyzed, one drop of  $SnCl_2$  solution in HCl (5 g  $SnCl_2$  is dissolved in 5 ml concentrated HCl + 95 ml water;  $pH=0.5$ ), and after some time two drops of 2-N. NaOH are placed on the filter paper and dried with warm air, at the same time observing the color of the spot. The detection limit is  $5 \times 10^{-6}$  g of selenite or tellurite. The presence of  $As^{+3}$  (also Sb) does not interfere with the detection of Se and Te; Bi interferes with the reaction in an alkaline medium. For the detection of As in the presence of Se and Te, it is recommended that one use the Tananaev and Panamarev method (after precipitating Se and Te with atomic H).  
-- B. Manole

Card 3/3



YUGOSLAVIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81983

Author : Stevanovic, Mirko; Mlinar, Anton; Kangrga, Dusanika

Inst : Not given

Title : The Detection of Fluoride

Orig Pub : Vojnosanit. pregl., 1959, 16, No 3, 217-219

Abstract : A microcrystalloscopic method for the detection of  $F^-$  has been developed. To 1 drop of the solution to be analyzed, placed on a microscope slide, 1 drop of saturated  $PbCl_2$  solution is added and the crystals formed are observed under 100 x magnification. At optimum conditions (1%  $F^-$  in 1 drop, dilution 1 : 50,000) starlike  $PbFCl$  crystals are formed; at 0.1%  $F^-$  (dilution 1 : 500,000), still visible crystals are grain-

Card 1/2

YUGOSLAVIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81983

like; at 0.2%  $F^-$  mixed crystals are obtained, and in this case it is recommended that one evaporate a drop of the solution to be analyzed and add the saturated  $PbCl_2$  solution to the dry residue. The best crystal form is obtained with the saturated  $PbCl_2$  solution in dilute  $H_2SO_4$  (1 : 20); however, then, the sensitivity of the reaction is considerably decreased. 1%  $F^-$  can be detected in the presence of 15%  $SO_4^{2-}$  by the above method. --  
N. N. Turkevich

Card 2/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81984  
Author : Romovacek, Jiri  
Inst : Not given  
Title : Titrimetric Determination of Carbon Disulfide  
Orig Pub : Collect. Czechosl. Chem. Communs., 1959, 24,  
No 2, 604-608

Abstract : A new method for the determination of CS<sub>2</sub>, based on the alkalimetric titration of dialkyldithiocarbamic acid formed in the reaction between CS<sub>2</sub> with a secondary amine, has been developed. The titration is performed in a pyridine, isopropyl alcohol, and water (2 : 2 : 1) medium, employing a potentiometric or a visual end-point; in the second case, 1% thymolphthalein solution in pyridine is used as the indicator.

Card 1/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81984

Best results are obtained when an excess of NaOH is added, and this is titrated with an HCl solution. Three secondary amines were tested: morpholine, diethanolamine, and piperidine; the first two amines give satisfactory results with both methods of end-point detection, whereas in the case of piperidine a slow color transition of the visual indicator is observed, and a poor potentiometric titration curve is obtained. In comparison with known methods the new method is considerably faster (< 10 minutes) and is applicable to industrial control. In the application of the method to the analysis of the first fraction from the distillation of benzene (containing 8-24% CS<sub>2</sub>)

Card 2/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81984

and to the estimation of the purity of  $CS_2$ ,  
good results were obtained. -- Jiri Vanecek

Card 3/3

CHINA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81985

Author : Not given

Inst : Not given

Title : Methods for Rapid Determination of Silicon and  
Aluminum Under Field Conditions

Orig Pub : Dizhi yuekan, 1958, No 12, 34-35

Abstract : The determination of  $SiO_2$  is based on the  
precipitation of Si as  $K_2SiF_6$  from a strongly  
acidic saturated KCl solution after the de-  
composition of the sample by the method of  
alkali fusion, the hydrolytic dissolution of  
the precipitate obtained, and the titration of  
the equivalent quantity of liberated HF with a  
standard NaOH solution. The sample (0.5 g)  
is fused with 4 g NaOH in Ag or a Ni crucible

Card 1/5

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81985

for 10 minutes at  $500^{\circ}$ ; the melt is leached out with hot water; 15 ml concentrated HCl is added with stirring, and after cooling the solution is diluted with water to 100 ml. To 25 ml of the resulting solution contained in an ebonite beaker, 5 ml concentrated  $\text{HNO}_3$  and 5 g KCl are added, and with continuous stirring 5 ml 20% KF solution is introduced. After 10 minutes the precipitate is separated by a filtration through a pulp filter and washed with a saturated KCl solution in 50%  $\text{C}_2\text{H}_5\text{OH}$  until the washings are no longer acidic; the precipitate with the filter is placed in 100 ml of water heated to  $80^{\circ}$ ; upon completion of hydrolysis, 2 ml 1% phenolphthalein solution is added, and this is titrated with 0.1 N. NaOH solution until

Card 2/5

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81985

a nondisappearing red tint is obtained. The determination of  $\text{Al}_2\text{O}_3$  is based on the complexation of Al as a soluble complex with Complexone III (I), the back-titration of the excess of (I) with  $\text{Zn}(\text{CH}_3\text{COO})_2$  solution at pH of 5.7 using the system ferrocyanide-ferricyanide benzidine as indicator, displacement of Al from the complex by precipitating  $\text{AlF}_3$  and back-titration of the liberated equivalent amount of (I) with  $\text{Zn}(\text{CH}_3\text{COO})_2$ . The sample (0.1-0.15 g) is fused with 2-4 g NaOH for 10-15 minutes at  $400-500^{\circ}$ ; the melt, after cooling, is leached out with hot water; this is acidified with concentrated HCl solution and diluted with water to 100 ml. To 25 ml of the resulting solution, 1-2 drops concentrated  $\text{HNO}_3$  and 10-15

Card 3/5

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81985

ml 2% solution of (I) are added; this is heated to 50-60°, neutralized with  $\text{NH}_4\text{OH}$  solution (1 : 3) in the presence of methyl orange, 5 ml acetate buffer (20.4 g  $\text{CH}_3\text{COONa}$  + 9.4 ml  $\text{CH}_3\text{COOH}$  in 1 liter) is added; this is boiled for 2-3 minutes, cooled; 6 drops 3% benzidine solution in glacial  $\text{CH}_3\text{COOH}$  and 3 drops ferro-ferricyanide solution (10 ml 10%  $\text{K}_3\text{Fe}(\text{CN})_6$  and 5 ml 1%  $\text{K}_4\text{Fe}(\text{CN})_6$  are diluted with water to 100 ml) are added, and this is titrated with  $\text{Zn}(\text{CH}_3\text{COO})_2$  solution (1.4 g metallic Zn is dissolved in 1 : 1  $\text{HCl}$ , neutralized with a 1 : 1  $\text{NH}_4\text{OH}$  solution; 100 ml acetate buffer solution and 2.1 ml glacial  $\text{CH}_3\text{COOH}$  are added, and this is diluted with water to 1 liter) until the appearance of a light-blue color; 1 g  $\text{NaF}$  is introduced;

Card 4/5

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81985

this is diluted with water to 100-120 ml, boiled for 10 minutes; upon cooling, 4 drops 3% benzidine solution and 2 drops of ferro-ferricyanide solution are added and titrated with  $\text{Zn}(\text{CH}_3\text{COO})_2$  solution. A control experiment is conducted at the same time. The presence of 1%  $\text{TiO}_2$  in the sample interferes.  
-- A. Petrenko

Card 5/5

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81988  
Author : Povondra, Pavel; Vebr, Jaroslav  
Inst : Not given  
Title : The Technical Analysis of Natural Fluorites  
Orig Pub : Chem. listy. 1958, 52, No 10, 2208-2209;  
Collect. Czechosl. Chem. Communs., 1959, 24,  
No 2, 637-640

Abstract : The feasibility of a rapid and certain decomposition of fluorites by evaporation with  $\text{HClO}_4 + \text{H}_3\text{BO}_3$  was determined. The sample of finely divided fluorite (1 g), dried at  $100^\circ$ , is boiled with 15 ml  $\text{HClO}_4$  (1 : 3), saturated at  $50^\circ$  with boric acid, and evaporated to dryness. To the residue after cooling, 5 ml concentrated  $\text{HCl}$  and 80 ml hot water are added.

Card 1/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81988

$\text{H}_2\text{SiO}_3$  which separated during this process is filtered off after 10 minutes and determined by the usual method of weight loss after several evaporations with  $\text{HF}$ . The residue is treated with several ml of  $\text{HCl}$  (1 : 4), diluted with hot water, filtered off, calcined, and weighed as  $\text{BaSO}_4$ . The combined filtrates are diluted with water to 250 ml and, using an aliquot of the resulting solution, Ca is determined by titration with 0.1 M Complexone III solution in strongly alkaline medium using murexide as the indicator. Small amounts of metals of the  $\text{NH}_4\text{OH}$  group are masked by adding 5 ml 30% triethanolamine solution; at greater Fe and Al contents these metals are previously separated by precipitating with urotropine. In order to

Card 2/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81988

correct for  $\text{CaCO}_3$ , the  $\text{CO}_2$  content is found by an indirect titrimetric determination; however, large quantities of  $\text{CaCO}_3$  have to be removed by the usual method after a preliminary decomposition with a dilute  $\text{CH}_3\text{COOH}$  solution. --  
Karel Kamen

Card 3/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81990

Author : Rezac, Zdenek; Adamec, Miroslav  
Inst : Not given  
Title : The Determination of Alkalies in Synthetic Pyrolusite

Orig Pub : Chem. listy, 1958, 52, No 10, 2006-2007;  
Collect. Czechosl. Chem. Commun., 1959, 24  
No 5, 1730-1732

Abstract : A simple method for the determination of alkalies adsorbed on synthetic pyrolusite was developed. Because of the very strong adsorption properties of pyrolusite, which interfere with the quantitative leaching of alkalies even in an acid medium,  $\text{MnO}_2$  is previously reduced to  $\text{MnO}$  by calcining with

Card 1/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81990

powdered carbon; the adsorption capacity of MnO for alkalies is considerably less. The sample of pyrolusite to be analyzed (1 g) is mixed with 1.5 g powdered carbon in a Pt crucible and calcined in an electric Silit oven for 10 minutes at 800°; calcining for a longer time and higher temperature does not influence the results. The cooled crucible is placed in 100 ml of water, boiled for 15 minutes, and the solution with the precipitate is diluted with water to 500 ml. After 15 minutes, 50 ml of the clear liquid is removed with a pipette provided with a cotton filter, and titrated with 0.1 N. HCl solution using Tashiro indicator (100 ml 0.03% methyl red solution in ethanol + 15 ml aqueous methylene blue solution);

Card 2/3

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81990

prior to the end-point the solution is heated to boiling. -- Karel Kamen

Card 3/3



CHINA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81993

Author : Not given

Inst : Not given

Title : A Simplified Analysis of Iron Ore Used for  
Pig Iron Smelting by the Local Method

Orig Pub : Dizhi yu kantan 1958, No 18, 8-11, 31

Abstract : The usual methods for the determination of  $\text{SiO}_2$   
(using gelatin)  $\text{Fe}_2\text{O}_3$  (using  $\text{K}_2\text{Cr}_2\text{O}_7$ ), S  
(as  $\text{BaSO}_4$ ), and P (as phosphovanadium molybdate  
complex) are described. -- A. Petrenko

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82007

Author : Dubsky, Ivo

Inst : Not given

Title : The Use of Complexometry for the Control of  
Plating Paths

Orig Pub : Chem. prumysl, 1959, 9, No 2, 80-81

Abstract : A method for the determination of  $\text{Cd}^{+2}$  in  
cadmium plating baths, and  $\text{Zn}^{+2}$  in zinc and brass  
baths was developed.  $\text{CN}^-$  ions are tied up with  
an excess of acetone. 10 ml of the sample is  
diluted with water to 100 ml; to 10 ml of the  
solution obtained, diluted with water, there  
are added 30-50 ml acetone, 10-15 ml ammon-  
iacal buffer solution (54 g  $\text{NH}_4\text{Cl}$  and 350 ml  
concentrated  $\text{NH}_4\text{OH}$  solution in 1 liter); this

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Inorganic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82007

is titrated with 0.5 M Complexone III solution in the presence of 0.1 g Eriochrome Black T (mixture of 1 g of indicator with 100 g NaCl) to a light-blue color of the solution. In the determination of  $Cd^{+2}$ , it is recommended that the titration be conducted very slowly, or that there be added to the solution titrated, 1 ml 0.05 M  $MgSO_4$ . In the analysis of plating salts, 1-2 g of the sample is dissolved in 100 ml of water, and 10 ml of the resulting solution is used for the determination. -- N. N. Turkevich

Card 2/2

POLAND / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82008

Author : Rusiecki, Wladyslaw; Bidzinski, Zygmunt;  
Lenicka, Joanna

Inst : Not given

Title : The Use of Thio Compounds for the Detection  
of Metals in Forensic Chemical Analysis

Orig Pub : Farmac. polska, 1959, 15, No 7, 113-115

Abstract : The possibility of using thioacetamide and  $Na_2CS_3$  instead of  $H_2S$  in forensic chemical analysis for the detection of Hg and As was studied. For the detection of Hg by precipitation from solutions obtained, following the mineralization of the biological material to be analyzed,  $Na_2CS_3$  was found to be most useful; thioacetamide behaves similarly to  $H_2S$ . The

Card 1/2

POLAND / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82008

most complete precipitation of As as sulfide takes place when  $H_2S$  and  $Na_2CS_3$  are used. On the basis of the data obtained, it is recommended that  $Na_2CS_3$  be used instead of  $H_2S$  for the detection of Hg and As. -- A. Nemodruk

Card 2/2

GDR / Analytical Chemistry. Organic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82016

Author : Kumpan, P.

Inst : Not given

Title : The Techniques of Elemental Analysis. Part I (continuation). Semimicro Determination of Carbon and Hydrogen

Orig Pub : Chem. Techn., 1958, 10, No 11; Glassapparaten-chnik, No 4, 25-30

Abstract : The general procedures for the determination of C and H through combustion of the organic substance (sample weights 25-45 mg) in an  $O_2$  stream inside a filled tube ( $PbO_2$  or  $CuO$  and Ag) heated automatically are described; the arrangement for connecting the absorption system to the tube, the regulation of the  $O_2$

Card 1/3

GDR / Analytical Chemistry. Organic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82016

stream, the execution of the blank experiment, the selection of the standard substance, the technique of weighing solid, viscous, liquid, and inflammable substances; the execution of combustion of solid and liquid substances manually or automatically. The viscous substances are previously diluted, while heating in a dry box, are placed in a tared boat, weighed after 10 minutes, and the sample in the boat is covered with a layer of quartz. A small  $KClO_3$  crystal is placed on the bottom of the capillary tube for poorly inflammable substances. A special protective rod wrapped with Pt wire, is placed in the tube after introducing the sample weight. The combustion of nonvolatile substances is carried out in an  $O_2$

Card 2/3

GDR / Analytical Chemistry. Organic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82016

stream (14-15 ml/min), and of volatile substances, in an air stream; the automatic heating is used for successive analyses only. Before weighing the absorption apparatus, the stopcocks are opened and closed to bring the pressure to atmospheric. The maximum error for C is  $\pm 0.3\%$ ; for H, from +0.2 to -0.1%. For the beginning of the article, see RZ Khim, No 12, 1959, No. 42139. -- V. Miroshina

Card 3/3

CHINA / Analytical Chemistry. Organic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82017

Author : Wu Tsun-hao

Inst : Not given

Title : A Direct Method for the Microdetermination of Oxygen in Organic Substances

Orig Pub : Hua xue shi jie, 1958, 13, No 12, 574-576

Abstract : A micro method for the direct determination of O was modified (RZ Khim, No 10, 1956, No. 29395). The accuracy of the determination of O in petroleum and plastics is 2%. The determination of O in organic substances containing C, H, Br, Cl, N, O, S, I, and As gives accurate results. The method is not applicable to substances containing F and P. -- From Author's Summary

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82020

Author : Vecera, Miroslav; Bulusek, Jaroslav

Inst : Not given

Title : Organic Quantitative Analysis. XX. The Study of the Micro Method for the Determination of Chlorine in Organic Substances by Combustion in an Empty Tube

Orig Pub : Chem. listy, 1958, 52, No 8, 1526-1536; Collect. Czechosl. Chem. Commun., 1959, 24, No 5, 1630-1642

Abstract : A rapid and simple micro method for the determination of Cl is described, and the causes of possible errors are discussed in detail. 1-6 mg of the substance is placed in a Pt boat and burned for 15 minutes in a

Card 1/3

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82020

tube (T) with a porous quartz insert heated by a portable (800°) and stationary (720°) electrical ovens in an O<sub>2</sub> stream (15 ml/min). Cl is trapped in an absorber, which is indirectly connected to (T) and which contains 2 ml 5% H<sub>2</sub>O<sub>2</sub>. After combustion, the solution is washed off from the absorber with 18 ml of alcohol; 5 drops of 0.02% aqueous Brilliant Yellow (adsorption indicator) solution and 0.1 N. KOH solution are added, resulting in a weakly alkaline solution; this is neutralized with 0.1 N. CH<sub>3</sub>COOH; one more drop of CH<sub>3</sub>COOH solution is added, and this is titrated with 0.01 N. AgNO<sub>3</sub> solution to the color change from greenish-yellow to orange and the simultaneous appearance of turbidity. In the

Card 2/3

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82020

presence of SO<sub>4</sub><sup>-2</sup> the color change is worse, therefore, in the analysis of substances containing S. Fibek's method is used for the titration (RZ Khim, No 2, 1958, No. 4320). In the calculation, a correction is made for the blank (0.014 ml 0.01 N. AgNO<sub>3</sub> solution). The results of the analyses of 1,5-dichloroanthraquinone, DDT, 2,4-dinitrochlorobenzene, hexachlorocyclohexane, and chlorobenzene are given. The maximum error is ± 0.3%; the average statistical error is 0.02%. For part XIX, see RZ Khim, No 18, 1959, No. 64206. --  
K. Kamen

Card 3/3

CHINA / Analytical Chemistry. Organic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82026

Author : Ko Hsiu-ch'i; Lu P'ei-chang

Inst : Not given

Title : The Accuracy of Methods for the Determination of Gases as Applied to Pure Hydrocarbons

Orig Pub : Chung-kuo K'o-hsueh-yuan Shih-yu Yen-chiu-so, Mei-t'an Yen-chiu-shih Yen-chiu Pao-kao Chi-kan, 1958, No 2, 24-34

Abstract : A distillation column for distillation of low-boiling gases ( $\text{CH}_4$ ,  $\text{C}_2\text{H}_6$ ,  $\text{C}_3\text{H}_8$ ,  $n\text{-C}_4\text{H}_{10}$ ,  $\text{iso-C}_4\text{H}_{10}$ ,  $\text{C}_2\text{H}_4$ ,  $\text{C}_3\text{H}_6$ ,  $\alpha\text{-C}_4\text{H}_8$ ,  $\beta\text{-C}_4\text{H}_8$ ,  $\text{iso-C}_4\text{H}_8$ ) was constructed. Upon comparison of the accuracy of the gaseous chromatographic method and the low-temperature distillation method for the analysis of 7- and 9- component

Card 1/2

CHINA / Analytical Chemistry. Organic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82026

mixtures of gaseous hydrocarbons, as well as of  $\text{H}_2$  and  $\text{N}_2$ , it was determined that, using silica gel and activated charcoal, the accuracy of gaseous chromatography is relatively high; the relative deviation is  $\leq 0.3\%$ , sometimes  $0.4\text{-}0.5\%$ ; the accuracy of both methods for the determination of hydrocarbons  $> \text{C}_2$  is the same, and only for the determination of  $\text{H}_2$ ,  $\text{N}_2$ , and  $\text{CH}_4$  by the low temperature distillation method is the relative deviation somewhat larger than  $1\%$ . -- A. P.

Card 2/2

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82027  
Author : Janak, J.; Novak, J.  
Inst : Not given  
Title : Chromatographic Semimicro Analysis of Gases.  
XIV. The Direct Determination of Individual  
Gaseous Paraffins and Olefins in Butadiene-1,3  
Orig Pub : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 2, 384-390  
Abstract : See RZ Khim, No 20, 1958, No. 67335

Card 1/1

HUNGARY / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82028  
Author : Schulek, Elemir; Maros, Laszlo  
Inst : Not given  
Title : Analysis of Aldehydes. I. Iodometric  
Determination of Formaldehyde and Acetaldehyde  
as  $\alpha$ -Oxysulfonates (Bisulfite Derivatives of  
Aldehydes)  
Orig Pub : Magyar kem. folyoirat, 1958, 64, No 12, 480-482  
Abstract : A method for the determination of HCHO and  
 $\text{CH}_3\text{CHO}$ , based on the iodometric determination  
of sulfite formed by the decomposition of the  
aldehyde-bisulfite compound with cyanide, is  
described. To the aldehyde solution (0.4-0.5  
g HCHO or 0.2-0.25 g  $\text{CH}_3\text{CHO}$ )  $\text{Na}_2\text{SO}_3$  solution  
is added, and the liquid is covered by a

Card 1/2



HUNGARY / Analytical Chemistry. Organic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82028

layer of pentane to prevent action by the atmospheric  $O_2$  and the loss of  $SO_2$ . The mixture is acidified with  $CH_3COOH$ , and after 10 minutes ( $HCHO$ ) or after 20 minutes ( $CH_3CHO$ ) the excess of sulfite is reacted with iodine  $NaOH$  and  $KCN$  solutions are added; after a few minutes, this is neutralized with  $HCl$  and titrated with 0.1 N. iodine solution. The accuracy is  $\pm 0.2\%$ . The advantages of the method can be attributed to the fact that oxidizers present and dissolved  $O_2$  are tied up by excess of sulfite and do not interfere with the analysis. -- I. Krishtofori

Card 2/2

HUNGARY / Analytical Chemistry. Organic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82039

Author : Fodurne Varga, Eva

Inst : Not given

Title : The Application of the van Slyke Micro Method as Modified by Hussey and Maurer

Orig Pub : Magyar kem. lapja, 1958, 13, No 3, 108-111

Abstract : The mechanism of the reaction of primary aliphatic amines with  $HNO_2$  and the modification of the van Slyke method (Hussey, Allen, S., and Mauer John, E., Anal. Chem. 24, 1642 (1952)) are discussed. An apparatus with ground glass joints instead of rubber connections was constructed; the absorption column arrangement was modified in order to decrease the hydrostatic pressure. -- I. Krishtofori

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82040  
Author : Vecera, M.; Gaspariĉ, J.  
Inst : Not given  
Title : Identification of Organic Substances. XXIII.  
The Paper Chromatographic Study of Aliphatic  
Amines  
Orig Pub : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 2, 465-473  
Abstract : See RZ Khim, No 9, 1959, No. 31102

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82041  
Author : Kubias, J.  
Inst : Not given  
Title : The Determination of Ethanolamines in Their  
Mixture  
Orig Pub : Collect. Czechosl. Chem. Commun., 1958, 23,  
No 11, 2012-2017  
Abstract : See RZ Khim, No 3, 1959, No. 8038

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82047

Author : Cuta, František; Klozar, Vaclav

Inst : Not given

Title : Coulometric Determination of Styrene and Methyl Oleate Present Together in the Same Mixture

Orig Pub : Chem. listy, 1958, 52, No 10, 1899-1902;  
Collect. Czechosl. Chem. Commun., 1959, 24,  
No 5, 1482-1486

Abstract : Methyl oleate (I) and styrene (II) present in the same mixture can be determined coulometrically, since the addition of the electrolytically generated Br to (II) occurs 15 times slower than to (I). Addition of Cl to both substances occurs with the same rate. The reaction is conducted in 10-16 N.  $\text{CH}_3\text{COOH}$  containing HBr

Card 1/2

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82047

(concentration 0.5-1 N.) or HCl (concentration 0.5-1.5 N.). (I) is determined in the first case; the sum of (I) and (II) in the second case; the content of (II) is calculated by difference. The maximum error in the determination is  $\pm 1\%$ ; the average error  $\pm 0.15-0.24\%$ , using 1 mg sample weights. -- O. Knessl

Card 2/2

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82049  
Author : Lakota, Vladimir  
Inst : Not given  
Title : Chromatographic Determination of Phenol in  
Technical Grade o-Cresol  
Orig Pub : Chem. listy, 1958, 52, No 10, 1922-1925;  
Collect. Czechosl. Chem. Communs., 1959, 24,  
No 4, 1127-1131

Abstract : A method was developed for the determination  
of phenol (I) in technical grade o-cresol (II)  
based on (1) the separation of (I) from both  
(II) and m-cresol (III) by chromatography,  
using the "inverse phase" method and the  
silicone-treated diatomaceous earth column  
containing  $\text{CHCl}_3$ , and based on (2) the

Card 1/3

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82049

photometric determination at 620  $\mu$ , the color  
being developed with the Gibbs reagent (1%  
solution of 2,6-dibromoquinonechlorimide in  
alcohol) after 3 hours. Diatomaceous earth  
was washed for 4 days with 15% HCl, then  
water, dried, calcined for 20 minutes at 900°,  
mixed with the solution of 20 ml ethyltrieth-  
oxylane [probably means ethyltriethoxysilane]  
in 480 ml dry  $\text{CCl}_4$  and, after removing the excess  
solution, dried for 5 hours at 160°. 200 g  
silicone treated diatomaceous earth was mixed  
with 150 ml  $\text{CHCl}_3$  saturated with water;  
additional water was added; the mixture was  
shaken; the residue was filtered on a Buchner  
funnel and placed in a column. Upon running  
the chromatogram by the displacement method

Card 2/3

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82049

using water saturated with  $\text{CHCl}_3$ , I, II, and III are separated into fractions. I is eluted first, then III and, finally, II; I is separated quantitatively even at a 1000 times excess of II. In the determination of I in technical grade II, a sample containing 10% I is chromatographed, and the first 10 fractions of the eluate, 20 ml each, (I is usually found in the 5th and 6th fractions) are taken for the photometric measurements. -- J. Vanecek

Card 3/3

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82051

Author : Franc, J.

Inst : Not given

Title : Chromatography of Aromatic Isomers. IX. Paper  
Chromatographic Separation of Some Benzene  
Mono- and Tricarboxylic Acids

Orig Pub : Collect. Czechosl. Chem. Commun., 1958, 23,  
No 11, 2018-2024

Abstract : See RZ Khim, No 13, 1959, No. 45631

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82052

Author : Franc, Jaroslav

Inst : Not given

Title : The Determination of the Methyl Ester of p-Toluic Acid in the Presence of the Dimethyl Ester of Terphthalic Acid by the Method of Paper Chromatography

Orig Pub : Chem. listy, 1958, 52, No 10, 2204-2205;  
Collect. Czechosl. Chem. Commun., 1959, 24,  
No 1, 302-304

Abstract : A paper chromatographic method for the separation of dimethyl terphthalate (I), methyl ester of p-toluic acid (II), and monomethyl terphthalate (III) as corresponding hydroxamic acids (HA) was developed. The method was

Card 1/4

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82052

utilized for the determination of II in technical grade I. HA are detected on the chromatogram with  $\text{FeCl}_3$  and determined quantitatively by the color intensities of the spots which are compared with a standard scale. In the analysis of technical grade I, the sample is enriched with II utilizing its greater solubility in alcohol; 5 g technical grade I is dissolved with heating in 50 ml 96%  $\text{C}_2\text{H}_5\text{OH}$ ; the solution is cooled, the crystals of I are filtered off and washed with  $\text{C}_2\text{H}_5\text{OH}$  (3 X 10 ml). The filtrate is evaporated to 20 ml, cooled; the separated crystals are filtered off again and washed with  $\text{C}_2\text{H}_5\text{OH}$  (3 X 5 ml). The filtrate is evaporated to 10 ml, and the precipitate is filtered off; to the filtrate

Card 2/4

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82052

40 ml  $\text{NH}_2\text{OH}$  solution (1 part 5%  $\text{NH}_2\text{OH}\cdot\text{HCl}$  solution in alcohol is mixed with 2 parts 5%  $\text{KOH}$  solution in alcohol, the solution is filtered) is added; this is heated for 10 minutes to boiling, cooled, filtered, and the volume is made up to 25 ml. 25  $\mu$  liter of the solution is placed on Whatman Paper No. 4 and chromatographed for 45 minutes by the descending method with the mixture  $\text{C}_4\text{H}_9\text{OH}-\text{C}_2\text{H}_5\text{OH}-\text{H}_2\text{O}$  (2 : 2 : 1); the chromatogram is dried and sprayed with the 2%  $\text{FeCl}_3$  solution in the mixture  $n\text{-C}_4\text{H}_9\text{OH}-\text{C}_2\text{H}_5\text{OH}$  (1 : 4), whereby HA acquires a blue violet color. The HA spots of I and III remain at the starting point;  $R_f$  for HA of II is 0.78. The minimum concentration which can be detected is 0.05% of II. To

Card 3/4

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82052

prepare the standard scale, the alcoholic solution containing 0.025 g II is mixed with 40 ml of hydroxylamine solution, heated for 10 minutes to boiling, diluted to the initial  $\text{C}_2\text{H}_5\text{OH}$  volume and 5, 10, 15  $\mu$  liter are pipetted off - this corresponds to 0.05, 0.10, and 0.20 [probably means 0.15] % II. --  
Bedrich Meloun

Card 4/4

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82056  
Author : Franc, J.  
Inst : Not given  
Title : Chromatography of Aromatic Isomers. X. The  
Energy of the Inner Hydrogen Bond of Amino-  
and Oxyanthraquinones  
Orig Pub : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 1, 250-257  
Abstract : See RZ Khim, No 14, 1959, No. 49328

Card 1/1

CZECHOSLOVAKIA / Analytical Chemistry. Organic Analysis. E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 82058  
Author : Velich, V.  
Inst : Not given  
Title : The Determination of 8-Oxyquinoline-5-sulfonic  
Acid  
Orig Pub : Collect. Czechosl. Chem. Commun., 1958, 23,  
No 9, 1803-1805  
Abstract : See RZ Khim, No 24, 1958, No. 81375

Card 1/1



COUNTRY: : Czechoslovakia  
CATEGORY : Laboratory Equipment. Instrumentation. F

ABS. JOUR. : RZKhim., No.23,1960, No. 82077

AUTHORS : Jiskra Zdenek, Fleischer Bernard  
INST. : Not given  
TITLE : High Temperature X-ray Camera

ORIG. PUB. : Hutn. listy, 1959, 14, No 4, 280-287

ABSTRACT : An X-ray camera for the study of change of phases and microstructure at high temperatures is described. The investigated specimen is heated in two cylindrical resistance furnaces with a diffraction slot between them. The entire system is enclosed into a cylindrical cassette 57.3 or 64 mm in diameter and is placed over a filming container in a vacuum from  $10^{-3}$  to  $10^{-5}$  mm Hg. With the use of a second container with vacuum-tight slot, both a cylindrical cassette\* as well as a counter, fitted on a movable arm, for the observation of the change of phases can be used. Centering of the specimen is done semiautomatically. Maximum temperature is  $1400^{\circ}$ .

CARD: 1/2

\*of 190 mm in diameter

COUNTRY : Czechoslovakia  
CATEGORY : F

ABS. JOUR. : RZKhim., No.23,1960, No. 82077

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : The temperature of the specimen is measured with a thermoelement. Photographs of Pt, Ag and steel were taken at temperatures ranging from 20 to  $1200^{\circ}$  and exposure time 60-120 minutes.

From Authors' Summary

CARD:

COUNTRY: : Czechoslovakia  
CATEGORY :

ABS. JOUR. : RZKhim., No.23,1960, No. 82085

AUTHOR : Hora Oldrich  
INST. : Not given  
TITLE : New Apparatus for Measuring Low Pressure

ORIG. PUB. : Automatizace, 1959, 2, Nr 1, 18-20

ABSTRACT : This is a brief review of apparatus manufactured by different companies.

Ya. Satunovskiy

CARD:

COUNTRY : Czechoslovakia  
CATEGORY :

ABS. JOUR. : RZKhim., No.23,1960, No. 82087

AUTHORS : Houdek M., Wittenberg E.  
INST. : Not given  
TITLE : Manometer for Measuring Low Steam Pressure

ORIG. PUB. : Paliva, 1959, 39, No 3, 93-95

ABSTRACT : Differential manometer of  $\pm 0.08$  mm of Hg is described.

Ya. Satunovskiy

CARD:

COUNTRY: : Poland  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23, 1960, No. 82113

AUTHOR : Olpinski Wojciech

INST. : Not given

TITLE : Colorimeter for Measuring the Thermoeffect

ORIG. PUB. : of Slow Reactions Between Solid and Gases  
Chem. analit., 1958, 3, No 3-4, 683-692

ABSTRACT : Description of a double colorimeter and a  
study of the reaction of carbon oxidation  
with atmospheric oxygen at 25-85° is given.  
The carbon was placed into both vessels of  
the colorimeter; air was passed through one  
of them and nitrogen with the same velocity

CARD: 1/2

COUNTRY : Poland  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23, 1960, No. 82113

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : through the second vessel. The difference  
in the temperature between the two vessels  
of the colorimeter was measured with a dif-  
ferential thermocouple.

A. Vorob'yev

CARD: 2/2

COUNTRY: : Czechoslovakia  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23, 1960, No. 82151

AUTHORS : Korinsky Jan, Rehecek Karel

INST. : Not given

TITLE : Laboratory Mixer with Circular Motion

ORIG. PUB. : Chem. prumysl, 1959, 9, No 1, 27

ABSTRACT : A laboratory mixer for simultaneous mixing of liquid in 9 chemical flasks consists of a board on which the flasks are fitted. The board is suspended in a horizontal position on silane strings and is connected to the eccentric of a 35 v motor.

CARD:

B. Kaplan

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZKhim., No. 1960, No.

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT :

CARD:

4

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. General and Theoretical  
Problems of Organic Chemistry  
ABS. JOUR. : RZKhim., No.23 1959, No. 82170  
AUTHOR : Kovar, J.; Blaha, K.  
INST. : -  
TITLE : The Configuration of Nitrogen-Containing  
Compounds. VI. The Configuration of Substi-  
tuted 2-aminocyclohexanols  
ORIG. PUB. : Collect. Czechosl. Chem. Commun, 1959, 24,  
No 3, 797-803  
ABSTRACT : No abstract.  
See RZhKhim., 1958, No 24, No 81560

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. General and Theoretical  
Problems of Organic Chemistry  
ABS. JOUR. : RZKhim., No.23 1959, No. 82175  
AUTHOR : Svoboda, M.; Jonas, J.; Sicher, J.  
INST. : -  
TITLE : Stereochemical Studies. X. Effects of Confi-  
guration and Size of Ring upon Dissociation  
Constants of 2-aminocyclanols  
ORIG. PUB. : Chem. listy, 1958, 52, No 8, 1596-1602; Col-  
lect. Czechosl. Chem. Commun, 1958, 23,\*  
ABSTRACT : The values of dissociation constants of pK'a  
cis- and trans-2-aminocyclanols, derivatives  
of cyclopentane down to cyclotridecane, as  
well as of derivatives of cyclohexadecane and  
cycloeicosane were measured. Dependence of  
the dissociation constant of 2-aminocyclanols  
on the ring dimension is similar to the cor-  
responding dependence discovered earlier (Pre-

\*No 8, 1551-1558

CARD: 1/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82175

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : log, V., Häfliger, O., Helv. chim. acta,  
cont'd. 1950, 33, 2021) for cycloalkylamines. In  
rings smaller than cyclononane, the cis-iso-  
mers of 2-aminocyclanols have higher pK'a  
values than trans-isomers. Beginning with  
2-aminocyclononanol, this dependence is of  
an inverse order. For the sake of comparison,  
the values of pK'a, as well as those of cer-  
tain N-methylated 2-aminocyclanols were meas-  
ured. Different basicity is explained by the

CARD: 2/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82175

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : presence of intramolecular hydrogen bonds,  
cont'd. the formation of which is influenced primari-  
ly by reciprocal remoteness of HO- and NH<sub>2</sub>-  
groups. The value of  $\Delta pK'a$  [ $pK'a(cis) = pK'a$   
(trans)] is a relative measure of this remote-  
ness. The values of  $\Delta pK'a$  show that in rings  
which are smaller than nine-membered ones,  
cis-isomer forms a hydrogen bridge easier  
than trans-isomer. Beginning with cyclononane  
the hydrogen bridge is formed easier in trans-

CARD: 3/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82175

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : isomer. Maximal remoteness of HO- and NH<sub>2</sub>-  
cont'd. groups is attained in 12-membered ring. The  
hydrochlorides (HC) of 2-aminocyclanols of  
the general formula  $\text{CHOHCH}_2(\text{CH}_2)_p-4\text{CH}_2\text{CHNH}_2 \cdot$   
•HCl (I) were prepared from alcohol solutions  
of 2-aminocyclanols by the addition of ether  
solution of HCl and by recrystallization from  
the mixture of C<sub>2</sub>H<sub>5</sub>OH + ether or iso-C<sub>3</sub>H<sub>7</sub>OH +  
ether (p in I, m.p. in °C cis- and trans-I,

CARD: 4/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No.23 1959, No. 82175

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : pK'a cis- and trans-I, are given): 5, --, --,  
cont'd. 9.11, 8.85; 6, --, --, 9.22, 9.07; 7, 177-179,  
115-117, 9.38, 9.30; 8, 186-187, 126-128,  
9.41, 9.37; 9, 170-171, 160-161, 9.36, 9.38;  
10, 136-138, 176-177, 9.17, 9.23; 11, 150-152,  
197-198, 9.11, 9.18; 12, 201-202, 228-229,  
8.99, 9.10; 13, 191-192, 213-215 (from alco-  
hol), 8.98, 9.07; 14, --, --,\*8.94, 8.99; 16,  
217-218, 184-185, 8.88, 8.90; 20, 173-174,  
139-141, 8.85, 8.86. The following were also  
\*8.93, 8.98; 15, --, --,

CARD: 5/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82175

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : determined: pK'a for cis- and trans-forms of  
cont'd. N-methyl I (p=6, 9.47, 9.15) and N,N-dime-  
thyl-I (p=6, 9.14, 9.08; p=10, 8.9, 8.89).  
The values of pK'a were determined by the  
titration of  $4 \cdot 10^{-3}$  N solutions of  $*(CH_3)_4NOH$   
at 20° in an N<sub>2</sub> atmosphere. Through the methy-  
lation of 1.15 g of trans-2-aminocyclanol  
(14 hrs of boiling with 5 ml of 90% HCOOH and  
5 ml of 40% CH<sub>2</sub>O), trans-2-dimethylaminocyc-  
lohexanol (II) is obtained; HC, m.p. 183-

CARD:

6/8

\*I in 80% aqueous methyl ether of  
methylene glycol with 0.1 N solu-  
tion of

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No.23 1959, No. 82175

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 184.5° (from alcohol); picrate, m.p. 146-  
cont'd. 148.5°. Analogously to II, HC of cis-2-dime-  
thylaminocyclohexanol, m.p. 182-183°, is ob-  
tained from the cis-compound. Similarly to II  
(40 hrs of boiling), from trans-2-aminocyclo-  
decanol, trans-2-dimethylaminocyclodecanol,  
yielding 92%, b.p. 97°/1 mm, is obtained; HC,  
m.p. 127-129° (from alcohol-ether); picrate,  
m.p. 109-110 (from alcohol). Similarly, from  
the cis-compound, cis-2-dimethylaminocyclo-

CARD:

7/8



COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82175

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : decanol, b.p. 100-103°/1 mm; HC, m.p. 139-  
cont'd 141° (from alcohol-ether); picrate, m.p. 123-  
123.5° (from iso-C<sub>3</sub>H<sub>7</sub>OH)\* Report IX, see  
RZKhim., 1959, No 20, No 71413.--- A. Emr

\*is prepared

CARD: 8/8

COUNTRY : POLAND G  
CATEGORY : Organic Chemistry. General and Theoretical  
Problems of Organic Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82188

AUTHOR : Cuta, F.; Beranek, E.; Pisecky, J.  
INST. : -  
TITLE : Spectrophotometric Investigation of Products  
of the Reaction of Sym. Trinitrobenzol with  
Hydroxides, Sulfites, Sulfides and Cyanides  
ORIG. PUB. : Chem. analit., 1958, 3, No 3-4, 281-289

ABSTRACT : Sym. trinitrobenzol (I) produces a red color  
with the ions OH<sup>-</sup>, SO<sub>3</sub><sup>-2</sup> and SH<sup>-</sup>, and with  
CN<sup>-</sup> a violet one reaching maximum at pH 9.  
The maximum of absorption increases up to a  
concentration of 0.5 n. NaOH, and with an in-  
crease of concentration up to 9 n. NaOH, dis-  
coloration occurs. The anion and range of  
values of pH at which coloring takes place,  
the maximum of absorption of acids obtained  
from the addition of the anion to I in mp,

CARD: 1/2

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82188

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and the maximum of absorption of I are given.  
cont'd OH<sup>-</sup>, 10.5-12.3, 440, 350; CN<sup>-</sup>, 8.3, 400, 300;  
SH<sup>-</sup>, 7-10, 461, 220; SO<sub>3</sub><sup>-2</sup>, 6-8, 462-470, --.  
The dissociation constant  $k = (1.8 \pm 0.1) \cdot 10^{-3}$   
at pH 8 for the reaction  $(I \cdot SO_3)^{-2} \rightarrow I + SO_3^{-2}$   
was calculated. The sensitivity of the reac-  
tion of I with SO<sub>3</sub><sup>-2</sup> at pH 9 constitutes 1:  
400,000. The dissociation constant of I,  
 $(1.2 \pm 0.2) \cdot 10^{-14}$ , was determined. The absorp-  
tion spectra of I with the above-mentioned  
anions are given.-- S. Ioffe

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry

ABS. JOUR. : RZKhim., No.23 1959, No. 82241

AUTHOR : Svoboda, M.; Tichy, M.; Sicher, J.  
INST. : -  
TITLE : Stereochemical Studies. XI. Synthesis of cis-  
and trans-2-aminocyclotetradecanol and 2-ami-  
nocylopentadecanol

ORIG. PUB. : Collect. czechosl. chem. commun., 1958, 23,  
No 10, 1958-1964; Chem. listy, 1958, 52, 1951

ABSTRACT : In order to study the relation between the  
configuration and chemical and physical pro-  
perties, cis- and trans-2-aminocyclotetradec-  
anol (cis- and trans-I) and cis- and trans-  
2-aminocylopentadecanol (cis- and trans-II)  
were synthesized. Through the hydrogenation  
of the oxime of 2-oxycyclotetradecanone (III)  
over Pt (from PtO<sub>2</sub>) in alcohol at ~20° and  
normal pressure, cis-I was obtained, yielding  
21.85 g (from 100 g III), m.p.120-121° (from

CARD: 1/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82241

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : benzene, ethyl acetate and alcohol); hydro-  
cont'd. chloride (HC), m.p. 223-224° (from alcohol-  
ether); N-benzoyl derivative (BD), yield 97%,  
m.p. 183-184° (from alcohol); N-p-nitroben-  
zoyl derivative (NBD), m.p. 194.5-195° (from  
alcohol). Analogically, from the oxime of  
2-oxycyclopentadecanone (IV), cis-II, yield  
11.75 g (from 44.2 g IV), m.p. 89-90° (from  
petr. ether and benzene), is obtained; HC,  
m.p. 220-222.5° (from alcohol-ether); BD,

CARD: 2/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82241

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : yield 90%, m.p. 142-142.5° (from acetone);  
cont'd. NBD, m.p. 162-163.5° (from alcohol). By boil-  
ing (18 hours) trans-2-phenyl-4,5-dodecama-  
ethylene- $\Delta^2$ -oxazoline with concentrated HCl  
in alcohol, trans-I was obtained, yielding  
93.5%, m.p. 105-106° (from petroleum ether);  
HC, m.p. 215-216° (from alcohol-ether); BD,  
yield 88.5%, m.p. 170-171° (from alcohol);  
NBD, m.p. 192-193° (from alcohol). Analogous-  
ly, from trans-2-phenyl-4,5-tridecamethylene-

CARD: 3/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82241

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT :  $\Delta^2$ -oxazoline, trans-II was synthesized, yield  
cont'd 82%, m.p. 93-93.5° (from petroleum ether);  
HC, m.p. 192-193°; BD, yield 83%, m.p. 143-  
143.5° (from acetone-alcohol); NBD, m.p. 181-  
182° (from alcohol). By interaction with 2  
moles of CH<sub>3</sub>SO<sub>2</sub>Cl in C<sub>5</sub>H<sub>5</sub>N (12 hours at 0°),  
the synthesized BD were transformed into cor-  
responding O-methane sulfonates [the initial  
amino-alcohol, yield of methane sulfonate in  
%, m.p. in °C (from ethyl acetate) are given]:

CARD: 4/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82241

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : cis-I, 99.5, 148-149; trans-I, 97, 129-130;  
cont'd cis-II, 100, 120-121; trans-II, 95, 107-108.  
The obtained methane sulfonates being heated  
with CH<sub>3</sub>COOK in alcohol (10-30 hours at 80-  
95°) are transformed into 2-phenyl-4,5-poly-  
methylene- $\Delta^2$ -oxazoline, the configuration of  
which is opposite to the initial amino-alco-  
hols [the initial amino-alcohol, polymethy-  
lene, yield in %, m.p. in °C (from petroleum  
ether), b.p. in °C/mm, m.p. of picrate in °C

CARD: 5/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82241

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : are given]: cis-I, trans-dodecamethylene,  
cont'd 95.8, 62-63, 190-200/0.2-0.3, 159-160 (from  
alcohol); trans-I, cis-dodecamethylene, 72,  
95-96, --, 160-161 (from alcohol); cis-II,  
trans-tridecamethylene, 95.6, 47-48, 180-  
190/0.16, 149-150 (from CH<sub>3</sub>OH); trans-II,  
cis-tridecamethylene, 91.6, 68.5-69, 195-  
202/0.2, 136.5-137 (from CH<sub>3</sub>OH). In BD and  
NBD of trans-I and trans-II left standing in  
dioxane, saturated with gaseous HCl, acyl

CARD: 6/8

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82241

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : migrates and HC of trans-2-benzoyloxy- or  
cont'd 2-p-nitrobenzoyloxycycloalkylamines are  
formed (acyl, cycloalkyl and m.p. in °C are  
given): benzoyl, tetradecyl, 172-173; p-nitro-  
benzoyl, tetradecyl, 173-175; benzoyl, penta-  
decyl, 166.5-167; p-nitrobenzoyl, pentadecyl,  
179-181. For cis-isomers such like migration  
is not observed. The configuration of the  
products was determined according to the  
various ability of acyls for migration,

CARD: 7/8

COUNTRY : G  
CATEGORY :

ABS. JOUR. : RZKhim., No.23 1959, No.82241

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : reaction ability at cyclization and infrared  
cont'd spectra. The graphic dependence of the melt-  
ing temperature of 2-aminocyclanols and their  
BD on the value of the cycle which has a  
sharp maximum for C<sub>12</sub> is given. Report X,  
see abstract 82175.-- Jan Kovar

CARD: 8/8

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry

ABS. JOUR. : RZKhim., No. 23 1959, No.82248

AUTHOR : Pospisil, J.; Ettel, V.  
INST. : -

TITLE : Oxidation of Pyrocatechin. III. Oxidation of  
4-methyl-pyrocatechin

ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 2, 341-346

ABSTRACT : No abstract.  
See RZhKhim., 1958, No 19, No 64406

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82249  
AUTHOR : Hermanek, S.; Stanek, J.  
INST. : -  
TITLE : A New Method of Synthesis of Homoisovanillin  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 4, 1366-1368  
ABSTRACT : No abstract.  
See RZKhim., 1958, No 24, No 81580

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82273  
AUTHOR : Chmatal, V.; Allan, Z. J.; Muzik, F.  
INST. : -  
TITLE : Aromatic Diazo- and Azo-Compounds. XXIX. Pre-  
paration of Tritriazolobenzol and Its Deri-  
vatives  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 2, 484-493  
ABSTRACT : No abstract.  
See RZKhim., 1959, No 10, No 34845

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA G  
 CATEGORY : Organic Chemistry. Synthetic Organic Chemistry  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82277  
 AUTHOR : Trojna, M.; Hubacek, J.  
 INST. : -  
 TITLE : Sulfonation and Some Derivatives of  $\beta,\beta,\beta$ -trichloro- $\alpha,\alpha$ -diphenylethane  
 ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24, No 3, 935-943  
 ABSTRACT : No abstract.  
 See RZKhim., 1958, No 24, No 81607

CARD: 1/1

COUNTRY : POLAND G  
 CATEGORY : Organic Chemistry. Synthetic Organic Chemistry  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82285  
 AUTHOR : Tarnowska, M.  
 INST. : Chemical Scientific Society of Lodz  
 TITLE : N-Ethanol- $\alpha$ -naphthylamide of 3-amino-6-methylbenzenesulphonic Acid  
 ORIG. PUB. : Soc. scient. lodz. acta chim., 1958, 3, 67-71  
 ABSTRACT : 3-NH<sub>2</sub>-6-CH<sub>3</sub>C<sub>6</sub>H<sub>3</sub>SO<sub>2</sub>N(R)CH<sub>2</sub>CH<sub>2</sub>OH (I), where always R= $\alpha$ -naphthyl, was synthesized by two methods: the condensation of 3-NO<sub>2</sub>-6-CH<sub>3</sub>C<sub>6</sub>H<sub>3</sub>SO<sub>2</sub>Cl (II) with RNH<sub>2</sub> and subsequent interaction between the formed 3-NO<sub>2</sub>-6-CH<sub>3</sub>C<sub>6</sub>H<sub>3</sub>SO<sub>2</sub>NHR (III), with CH<sub>2</sub>OHCH<sub>2</sub>Cl (IV) and the reduction of the formed 3-NO<sub>2</sub>-6-CH<sub>3</sub>C<sub>6</sub>H<sub>3</sub>SO<sub>2</sub>N(R)CH<sub>2</sub>CH<sub>2</sub>OH (V), as well as the condensation of RNHCH<sub>2</sub>CH<sub>2</sub>OH (VI) with II. The latter method produces

CARD: 1/6



COUNTRY : G  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82285

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : better results since, during the preparation of I according to the first method, difficulties occur in the separation of IV from the excess of III. It is better to use the latter method in the form of a Na- or K-salt insoluble in C<sub>6</sub>H<sub>6</sub>. To 3.5 moles of HSO<sub>3</sub>Cl, during 1.5 hours (at a temperature not below 110° and not above 115°), 1 mole of p-NO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CH<sub>3</sub> was added, heated for 1 hour at 115° and 1 hour at 120°, poured out hot (80°) on

CARD: 2/6

COUNTRY : G  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82285

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : ice, and 92% of II was obtained; b.p. 220°/  
cont'd /28 mm, m.p. 45-47° [from (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>O]. 0.3 mole of II was added during 10 min at 95-100° to 0.3 mole of RNH<sub>2</sub> in 48 g of pyridine; after about 2 hours ~400 ml of water were added and by oxidation with HCl, III was separated, yielding 74%. III, m.p. 155-157° (from alcohol, then from benzene) was also obtained with a yield of 70% by heating for ~2 hours, almost

CARD: 3/6

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82285

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : to the the b.p., of 0.5 mole of  $\text{RNH}_2$  with  
cont'd 0.5 mole of II and 0.5 mole of  $\text{CH}_3\text{COONa} \cdot 3\text{H}_2\text{O}$   
in 300 ml of 30% alcohol. 25 mmoles of III  
were added to 3 g of NaOH in 200 ml of water;  
then, during 15 min at  $80-90^\circ$ , 75 mmoles of  
IV were added, and after 1 hour the crushed  
residue obtained was boiled with dilute NaOH  
and 62% of V was obtained, m.p.  $126-127^\circ$  (from  
alcohol). V, with a yield of 71%, was also  
obtained by the addition, during 30 min at

CARD: 4/6

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82285

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT :  $85^\circ$ , of 0.16 mole of II to a mixture of 0.15  
cont'd mole of VI, 21.8 g of  $\text{CH}_3\text{COONa} \cdot 3\text{H}_2\text{O}$  and 300  
ml of ~25% alcohol with subsequent heating  
for 1 hour. 0.03 mole of V was added for 15  
min at  $80-90^\circ$  to a mixture of 11 g of Fe-  
filings, 1.5 ml of 36% HCl and 100 ml of wa-  
ter; after 2 hours the mixture was alkalized,  
the residue was extracted with alcohol in the  
Soxhlet apparatus, the extract was evaporated,

CARD: 5/6

COUNTRY : G  
CATEGORY :

ABS. JOUR. : RZKhim., No.23 1959, No. 82285

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : dissolved in HCl, and with dilute NaOH 60%  
cont'd of I was separated, m.p. 92-94° (from alco-  
hol).-- N. Turitsyna

CARD: 6/6

COUNTRY : CHINA G  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry

ABS. JOUR. : RZKhim., No.23 1959, No. 82292

AUTHOR : Yen Chih-kuang; Wang Jen  
INST. : -  
TITLE :

ORIG. PUB. : Investigation of Tetrahydrofuran. IV. Hydro-  
genation of Furan in a Gaseous Phase under  
Normal Pressure

ORIG. PUB. : K'ie-hsüeh t'ung-pao, Nauchn. vestn., Scien-  
tia, 1958, No 24, 753-754

ABSTRACT : The conditions of hydrogenation of furan (I)  
in a gaseous phase under normal pressure were  
studied. Skeletal Ni (Ni 38.6%, Cr/Ni=0.03)  
was used as a catalyzer. The following opti-  
mal conditions for the performance of the re-  
action were established: temperature of reac-  
tion 110°, volumetric velocity ~ 450-550  
l.hour<sup>-1</sup>, concentration of I, 18-20%. The  
yield of tetrahydrofuran under these conditions

CARD: 1/2

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82292

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : amounts to 93-95%.  $C_4H_9OH$  is a by-product of  
cont'd the reaction; its yield augments with an in-  
crease of the temperature of the reaction  
and with a decrease of the volumetric velo-  
city. Report III, see RZKhim., 1959, No 17,  
No 60848.-- L. Popova

CARD: 2/2

COUNTRY : RUMANIA  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82296

AUTHOR : Manta, I.; Berger, T.; Silaghi, E.  
INST. : -  
TITLE : Synthesis of Certain Coronary Dilating  
Chromones and Flavones

ORIG. PUB. : Rev. chim. (RPR), 1959, 10, No 2, 69-71

ABSTRACT : With a view to pharmacological trials, 3-me-  
thyl- and 2,3-dimethylchromones (Ia,b),  
3-methylflavone (II) and 7-R-flavones [IIIa-d,  
where a  $R=OCH_3$ ; b  $OCH_2COOC_2H_5$ ; c  $OCH_2C_6H_5$ ;  
d  $OCH_2CH_2N(C_2H_5)_2$ ] were synthesized. 4 g of Na  
powder are introduced at  $0-5^\circ$  into a mixture of  
50 g of o-oxypropiofenone (IV) and 300 g of  
 $HCOOC_2H_5$ , mixed for 8 hours at  $15^\circ$ , poured  
out into water, oxidized and Ia is separated;

CARD: 1/5

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82296

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : yield 70%, m.p. 60° (from ligroin). Mixture  
cont'd of 25 g of IV, 12 g of CH<sub>3</sub>COONa and 30 g of  
(CH<sub>3</sub>CO)<sub>2</sub>O is heated for 7 hours at 180°,  
poured into water, mixed for 3 hours, the  
product is treated with 5% NaOH and Ib is ob-  
tained, yield 68%, m.p. 97° (from water).  
45 g of IV, 200 g of C<sub>6</sub>H<sub>5</sub>COONa and 150 g of  
C<sub>6</sub>H<sub>5</sub>COCl are heated for 10 hours at 180-185°  
and II is separated, yielding 72%, m.p. 66°  
(from alcohol). 25 g of resacetophenone, 95

CARD: 2/5

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82296

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : g of C<sub>6</sub>H<sub>5</sub>COCl and 125 g of C<sub>6</sub>H<sub>5</sub>COONa are hea-  
cont'd ted for 4 hours at 180-185° and processed  
with 0.8 l of alcohol, boiled for 30 min with  
a solution of 90 g of KOH in 0.1 l of water,  
the alcohol is removed and the residue is  
poured into 1.5 l of water; CO<sub>2</sub> is passed  
through the solution and 25 g of 7-oxyflavone  
(V), m.p. 240° (from ethyl acetate) are sepa-  
rated. To 20 g of V, in a solution of 3.4 g

CARD: 3/5

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZKhim., No.23 1959, No. 82296

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of NaOH in 20 ml of water, a solution of 10  
cont'd g of  $\text{CH}_2\text{ClCOOH}$  in 20 ml of water is gradually  
added for 8 hours, diluted in water, the pro-  
duct is precipitated with dilute HCl (1:1),  
reprecipitated from  $\text{NaHCO}_3$ , etherified with  
alcohol and HCl, and IIIb is obtained, yield-  
ing 60%, m.p.  $122^\circ$  (from alcohol). V is me-  
thylated with  $(\text{CH}_3)_2\text{SO}_4$  in alkaline medium  
and IIIa is separated, yielding 65%, m.p.  
 $110^\circ$  (from ether). By the benzylation of V

CARD: 4/5

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82296

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : in aqueous  $\text{CH}_3\text{OH}$ , comprising NaOH, IIIb is  
cont'd synthesized, yielding 52%, m.p.  $174-175^\circ$  (from  
ether). Analogously, from V and  $\text{ClCH}_2\text{CH}_2\text{N}-$   
 $(\text{C}_2\text{H}_5)_2$ , IIIc is obtained, hydrochloride,  
m.p.  $136-137^\circ$ .--- D. Vitkovskiy

CARD: 5/5

COUNTRY : BULGARIA G  
 CATEGORY : Organic Chemistry. Synthetic Organic Chemistry  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82308  
 AUTHOR : Spasov, A.; Panayotova, B.  
 INST. : Sofia University, Physicomathematical Faculty  
 TITLE : Interaction of  $\beta$ -Lactams and Organomagnesium Compounds  
 ORIG. PUB. : Godishnik Sofiysk. un-t. Fiz.-matem. fak., 1956-1957 (1958), 51, No 3, 87-101  
 ABSTRACT : In the boiling (3 hours) of  $\beta$ -lactam of  $\alpha,\beta$ -diphenyl- $\beta$ -(N-phenyl)-aminopropionic acid with 2 moles of  $C_6H_5MgBr$ , a mixture of an alcohol-soluble ketone,  $C_6H_5CH(NHC_6H_5)CH-(C_6H_5)COC_6H_5$  (I), is formed in ether, m.p.  $147^\circ$  (from alcohol), and a substance insoluble in alcohol, m.p.  $177-178^\circ$  (from isoamyl acetate), identical to a compound previously obtained by condensation of benzylideneaniline and benzylphenylketone (II)

CARD: 1/4

COUNTRY : G  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82308  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : (see Francis, E.J., Chem. Soc., 1900, 77, 1195), which is apparently 1,2,3,4-tetra-phenylazetidinol-2 (III). I is hydrolyzed by water, aqueous alcoholic HCl on aniline and II; it gives oxime, m.p.  $91.5-92^\circ$  (from alcohol), and when heated with  $C_6H_5NHNH_2$  in alcohol, decomposes into aniline, II and  $C_6H_5CHO$ ; with phenylisocyanate (IV), from I a derivative of phenylurea is formed, m.p.

CARD: 2/4

COUNTRY : G  
CATEGORY :

ABS. JOUR. : RZKhim., No.23 1959, No. 82308

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 165-167° (from alcohol-CH<sub>3</sub>COOH). By heating  
cont'd with C<sub>6</sub>H<sub>6</sub> in the presence of C<sub>2</sub>H<sub>5</sub>ONa, I is  
isomerized into III. The structure of I was  
confirmed by synthesis from benzalanyl and  
II (10-12 hours, 60-70°). III decomposes  
when heated with concentrated aqueous alco-  
holic HCl into aniline, C<sub>6</sub>H<sub>5</sub>CHO, II and a  
chlorine-containing substance, m.p. 240°, of  
undetermined structure; it does not react  
with NH<sub>2</sub>OH and C<sub>6</sub>H<sub>5</sub>NHINH<sub>2</sub>, and when heated

CARD: 3/4

COUNTRY : G  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82308

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : with IV in xylol it gives urethane, m.p.  
cont'd 155.5-157° (from aqueous CH<sub>3</sub>COOH).-- D. Vit-  
kovskiy

CARD: 4/4



COUNTRY : CHINA G  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82327  
AUTHOR : Chu Pao-chieh  
INST. : -  
TITLE : Synthesis of Antipyrine

ORIG. PUB. : Yao-hsüeh t'ung-pao, Yaoxue tongbao, 1958,  
6, No 12, 565-567  
ABSTRACT : 3.72 kg of aniline (15-20 min) and 2.9 kg of  
a solution of  $\text{NaNO}_2$  (1:1.5) at  $7^\circ$  are added  
to 12 kg of HCl acid at  $4^\circ$ ; after termination  
of dinitration, 18 kg of  $\text{NaHSO}_3$  are added,  
mixed until the appearance of red color of  
the solution, heated for 5 hours at  $60^\circ$ , 24  
kg of HCl acid are added, cooled to  $15^\circ$  and  
5.6 kg of  $\text{C}_6\text{H}_5\text{NHNH}_2 \cdot \text{HCl}$  are obtained. To 1.14  
kg of the latter, 1,000 ml of 25% NaOH are  
added and heated, the oily layer is separated.

CARD: 1/3

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82327

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : extracted with benzol, and  $\text{C}_6\text{H}_5\text{NHNH}_2$  (I) is  
cont'd obtained, yield 95.07%, m.p.  $157-162^\circ/40-50$   
mm. 120 g of  $\text{CH}_3\text{COCH}_2\text{COOC}_2\text{H}_5$ , 20 ml of water  
and 33 ml of alcohol are added to 100 g of I,  
heated to  $70-80^\circ$ , cooled after two hours to  
 $40^\circ$ , left standing for 4 hours at  $40-50^\circ$ ,  
heated for 4 hours at  $80-90^\circ$ , cooled down to  
 $10^\circ$ , filtered, washed with alcohol and 152.5  
g of 1-phenyl-3-methylpyrazolone-5 (II) are

CARD: 2/3

COUNTRY :  
CATEGORY : G

ABS. JOUR. : RZKhim., No.23 1959, No. 82327

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : obtained, m.p. 123-127°. 600 g of II and  
cont'd 480 g of  $(CH_3)_2SO_4$  are heated to 150° and  
left standing for 1.5 hours at 195-205°,  
cooled to 120°, 1,200 ml of 30% NaOH are  
added, heated for one hour at ~100°, the  
oily layer is separated, extracted with  
benzol and antipyrine is obtained, yield  
84.19%.-- L. Popova

CARD: 3/3

COUNTRY : HUNGARY G  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry

ABS. JOUR. : RZKhim., No. 23 1959, No. 82328

AUTHOR : Lempert, K.; Breuer, J.; Lempert-Streter, M.  
INST. : -  
TITLE :

: Hydantoins, Thiohydantoins, Glycocyamidines.  
Report III. Orientation in the Monobenzyla-  
tion of 5,5-diphenylglycocyamidine

ORIG. PUB. : Magyar kem. folyoirat, 1959, 65, No 4, 142-  
145

ABSTRACT : No abstract.  
See RZhKhim., 1959, No 16, No 57136

CARD: 1/1

COUNTRY : GDR  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR : Ried, W.; Müller, W.

INST. : -

TITLE : Cyclization Reactions with 2-aminobenzo-  
and 2-aminonaphtho-imidazoles

ORIG. PUB. : J. prakt. Chem., 1959, 8, No 3-4, 132-149

ABSTRACT : By the condensation of 2-aminonaphtho-(2,13'-4,5)-imidazole (I), 2-aminonaphtho-(1',2'-4,5)-imidazole (II) and 2-aminobenzimidazole (III) with 1,3-dicarbonyl compounds (DCC), the derivatives of naphtho-[2,3-b]-, naphtho-[1,2-b]- and benzo-[b]-(1,4,8)-pyrimidazoles (IV-VI), respectively, were synthesized. 0.1 mole of BrCN is added to the suspension of 0.1 mole of 2,3-diaminonaphthalene in 150 ml of water at 0-5°, and left standing for 12-15

CARD: 1/13

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT  
cont'd

: hours at this temperature, then for one day at 20° and for one day at 30-35°; then the solution is heated for 6-8 hours at 90-100°, alkalized with NH<sub>4</sub>OH and I is separated, yield 81%, m.p. 291-293° (decomp.; from water); picrate, m.p. 318-320° [decomp.; from tetrahydrofuran (VII)]; hydrochloride, m.p. 296-298°; acetyl derivative, m.p. 342-344° (decomp.). 0.2 mole of BrCN is added at 0-5° to 0.2 mole of

CARD: 2/13

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 1,2-diaminonaphthalene or its dihydrochloride  
cont'd in 0.3 l of water, left standing for 10 hours  
at 0-5°, then for 12-15 hours at 20°, heated  
for 5 hours at 40-45° and II is obtained,  
yield 82-87%, m.p. 212-213°. 0.01 mole of  
I-III and 0.01 mole of DCC in 50-100 ml of  
xylol are left standing for 1-2 hours at ~20°,  
sometimes in the presence of piperidine or  
tritan B, then boiled and the product is sepa-  
rated and crystallized from aqueous HCON(CH<sub>3</sub>)<sub>2</sub>

CARD: 3/13

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : or aqueous pyridine and the following is ob-  
cont'd tained (initial substances, duration of reac-  
tion in hours and temperature in °C, product,  
yield in percent and m.p. in °C are indica-  
ted): dibenzoylmethane (VIII), III, 5, 140,  
2,4-diphenyl-VI, 79, 283-285 (decomp.); VIII,  
I, 19, 140, 2,4-diphenyl-IV, 48, 312-315;  
acetic ether (IX), I, 1, 140, 4-oxy-2-methyl-  
IV, 93, 352-356 (decomp.) [picrate (P), m.p.

CARD: 4/13

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 298-300° (decomp.)]; benzoylacetic ether, I,  
cont'd 2, 140, 2-oxy-2-phenyl-IV, 86, 370-372; p-  
nitrobenzoylacetic ether, I, 2, 140, 2-oxy-  
2-(p-nitrophenyl)-IV, 45, 384-386 (decomp.);  
α-methyl-IX, I, 2, 140, 4-oxy-2,3-dimethyl-  
IV, 38, 356-358 (decomp.); formylphenyl-IX,  
I, 1, 140, 4-oxy-3-phenyl-IV, 69, 305-308;  
diketene, I, 3, 100, 4-oxy-2-methyl-IV, 88,  
352-356 (decomp.); diketene, II, 4, 100,  
4-oxy-2-methyl-V, 86, 338-341 (decomp.);

CARD: 5/13

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : diketene, III, 2, 100, 4-oxy-2-methyl-VI, 90,  
cont'd 298-302 (decomp.) (P, m.p. 235-236°); diethyl  
ether of acetonedicarboxylic acid, I, 8, 140,  
4-oxy-2-carbethoxymethyl-IV, 90, 264-266 (de-  
comp.) [hydrazide, m.p. 353-354° (decomp.)];  
tetraethyl ether of propanetetra-carboxylic  
acid, I, 4, 140, bis-(2,4-dioxynaphtho-[2,3-b]  
[1,4,8]-pyrimidazolyl-3)-methane, 50, 366-369  
(decomp.); ethyl ether (EE) of cyclopentanone-

CARD: 6/13

COUNTRY : G  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82330  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : 2-carboxylic-1 acid (X), II, 2, 140, 2-oxy-  
 cont'd 2,3-trimethylene-V, 80, 352-354 (decomp.);  
 X, I, 2, 140, 2-oxy-2,3-trimethylene-IV, 89,  
 354-356 (decomp.) [P, m.p. 265-266° (decomp.,  
 from C<sub>6</sub>H<sub>5</sub>NO<sub>2</sub>)]; EE of cyclohexanonecarboxylic  
 (XI), I, 5, 140, 4-oxy-2,3-tetramethylene-IV,  
 87, 344-346 [P, m.p. 320-322° (decomp.; from  
 C<sub>6</sub>H<sub>5</sub>NO<sub>2</sub>)]; benzoylpyruvic acid (XII), I, 3,  
 140, 2-phenyl-IV, --, 342-347; XII, III, 3,  
 140, 2-phenyl-VI, 47, 287-290; phenylmalonic  
 \*acid  
 CARD: 7/13

COUNTRY : G  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82330  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : ether, I, 3, 140, 2,4-dioxy-3-phenyl-IV, 80,  
 cont'd 328-330 (decomp.); ethoxymethyleneacetylacet-  
 one, I, 0.5, 140, 2-methyl-3-acetyl-IV, 84,  
 254-256 (decomp.) [2,4-dinitrophenylhydrazones,  
 m.p. 273-274° (decomp.)]; ethoxymethylene-IX,  
 I, 0.75, 140, 2-methyl-3-carbethoxy-IV, 93,  
 268-270 (decomp.) [is hydrolyzed by methanol  
 solution of KOH at 100° into acid, m.p. 341-  
 343° (decomp.)]; ethoxymethylenemalonic ether,  
 CARD: 8/13

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No.23 1959, No. 82330

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : I, 2, 140, 2-oxy-3-carbethoxy-IV, 54, 336-  
cont'd 339 (decomp.); dimethylacetal of  $\beta$ -ketobu-  
tyraldehyde (XIII), I, 2, 140, 2-methyl-IV,  
77, 315 (decomp.); XIII, III, 2, 140, 2-me-  
thyl-VI, 82, 231-233 (decomp.);  $\alpha$ -methyloxy-  
methyleneacetone, I, 0.5, 100, 2,3-dimethyl-  
IV, 91, 317-320 (decomp.). The mixture of  
0.01 mole of I-III and 0.1 mole of DCC in al-  
cohol, with VII or without solvent, is heated  
and the following are separated (designations

CARD: 9/13

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and order are the same): acetylacetone, I, 2,  
cont'd 170-190, 2,4-dimethyl-IV, 79, 283-285; ben-  
zoylacetone, I, 30, 90, 2-methyl-4-phenyl-IV,  
19, 298-303 (from the filtrate 2-phenyl-4-  
methyl-IV is separated, yield 13%, m.p. 274-  
278°); diethyl ether of succinylsuccinic acid  
(XIV), I, 5, 90, 2,14-dioxy-3-carbethoxy-1,4-  
dihydrobenzo-(f)-IV, 81, 375-379 (decomp.);  
XIV, III, 10, 90, 2,12-dioxy-3-carbethoxy-1,4-

CARD: 10/13

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : dihydrodibenzo-[b,f][1,4,8]-pyrimidazole, 84,  
cont'd 285-287 (decomp.) [are hydrolyzed with con-  
centrated HCl at 100° into 2,12-dioxy-1,4-di-  
hydrodibenzo-[b,f][1,4,8]-pyrimidazole, m.p.  
312-314° (decomp.)]; XI, III, 19, 90. 4-oxy-  
2,3-tetramethylene-VI, 68, 301-304; EE of  
cyclohexanone-2-oxalic acid (XV), I, 20 days,  
20, 2,3-tetramethylene-4-carbethoxy-IV, 38,  
236-238 (decomp.); XV, III, 14 days, 20, 2,3-  
tetramethylene-4-carbethoxy-VI, 71, 173-174;

CARD: 11/13

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82330

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : oxymethyleneacetophenone (XVI), III, 10, 90,  
cont'd 2-phenyl-VI, 61, 287-290; XVI, I, 7, 90, 2-  
phenyl-IV, 14, 342-347; XVI, II, 10, 90, 2-  
phenyl-V, 41, 263-264; malonic ether (XVII),  
I, 0.75, 223, 2,4-dioxy-IV, 92, 359-361 (de-  
comp.); ethyl-XVII, I, 0.5, boiling, 2,4-di-  
oxy-3-ethyl-IV, 79, 334-336 (decomp.); tri-  
carbethoxymethylene, I, 5, 90, 2,4-dioxy-8-  
carbethoxy-IV, 50, 335-340 (decomp.); oxyme-

CARD: 12/13



COUNTRY : G  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82330  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : thylene-cyclohexanone-2 (XVIII), 10, 70, 2,3-  
 cont'd tetramethylene-IV, 91, 258-260; XVIII, II,  
 7, 90, 2,3-tetramethylene-V, 71, 238-240;  
 XVIII, III, 5, 90, 2,3-tetramethylene-VI,  
 93, 218-220.-- L. Shchukina

CARD: 13/13

COUNTRY : GDR G  
 CATEGORY : Organic Chemistry. Synthetic Organic Chemistry  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82354  
 AUTHOR : Wannagat, U.; Liehr, W.  
 INST. : -  
 TITLE : Hydrazine-Silicon Compounds. II. Mixed  
 Alkylaryl and Silyl-Substituted Hydrazines  
 ORIG. PUB. : Z. anorgan. und allgem. Chem., 1959, 299,  
 No 5-6, 341-348  
 ABSTRACT : By the reaction of  $R_3SiCl$  (I) ( $R=CH_3$ ) with  
 $CH_3NHNH_2$ , the following were obtained:  $CH_3NH-$   
 $NHSi(CH_3)_3$  (II) and  $(CH_3)_3SiN(CH_3)NHSi(CH_3)_3$   
 (III). From  $(CH_3)_2NNH_2$  and I,  $(CH_3)_2NNHSi-$   
 $(CH_3)_3$  (IV) was obtained and from  $CH_3NHNHCH_3$   
 and I,  $CH_3NHN(CH_3)Si(CH_3)_3$  (V) was separated.  
 By the interaction of  $C_6H_5NHNH_2$  with I,  $C_6H_5-$   
 $NHNHSiR_3$  were prepared (VIa-d, where a  $R=CH_3$ ,  
 b  $R=C_2H_5$ , c  $R=n-C_3H_7$ , d  $R=C_6H_5$ ). For the

CARD: 1/4

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No.23 1959, No. 82354

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : obtained substances, the yield in percent,  
cont'd b.p. in °C/mm, nD, d<sub>4</sub>, and in parentheses  
temperature in °C are given as follows:  
II, 99.5, 96-97/760, --, --; III, 95, 73-  
75/40, 1.3820 (19); 0.77076 (19); IV, 91,  
100/760, 1.4018 (22), 0.96585 (20); V, 87.5,  
61-63/260, 1.3818 (20), --; VIa, 93, 72-  
74/0.5, 115-116/12, 1.5409 (19), 0.9768 (20);  
VIb, 95, 118-120/0.5, 129-130/1, 1.5210 (20),  
--; VIc, 90, 145.5/1, 1.4918 (20), --; VID,

CARD: 2/4

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82354

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : yield 80%, m.p. 82°. The attempt at introdu-  
cont'd cing the second group of SiR<sub>3</sub> into V or VI  
was unsuccessful. The tendency for condensa-  
tion with I decreases in the series H<sub>2</sub>NNH-  
SiR<sub>3</sub> > CH<sub>3</sub>NNHHSiR<sub>3</sub> > (CH<sub>3</sub>)<sub>2</sub>NNHHSiR<sub>3</sub>. In the pre-  
sence of air, VIb-c is stained blue. To one  
mole of substituted hydrazine in 30-50 ml of  
ether under refrigeration,  $\frac{1}{2}$  to  $\frac{2}{3}$  mole of  
R<sub>3</sub>SiCl in 30-50 ml of absolute ether or in

CARD: 3/4

COUNTRY : G  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82354

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the case of VI, in C<sub>6</sub>H<sub>6</sub>, is slowly added,  
cont'd mixed for 15-25 hours and from the filtrate,  
after removing the solvent, II-VI are separated. Report I, see RZhKhim., 1959, No 11,  
No 38106.-- S. Ioffe

CARD: 4/4

COUNTRY : POLAND G  
CATEGORY : Organic Chemistry. Natural Substances and  
Their Synthetic Analogs

ABS. JOUR. : RZKhim., No. 23 1959, No. 82390

AUTHOR : Jedlinski, Z.  
INST. : -  
TITLE : Synthesis, Properties and Structure of Certain  
Esters of Fatty Acids of Methyl- $\alpha$ -D-Glucopy-  
ranoside and Methyl- $\beta$ -D-Glucopyranoside

ORIG. PUB. : Roczn. chem., 1958, 32, No 6, 1257-1268

ABSTRACT : The synthesis of esters of fatty acids and  
methylglucosides by heating of fatty acids  
and glucosides at 170-180° in xylol, with  
azeotropic dehydration, in the presence of  
the catalyzers ZnO and PbO, is described.  
It has been shown that the OH-group in C(2)  
of methylglucosides is acylated selectively;  
under the action of one mole of acid upon one  
mole of glucoside, mainly 2,6-cyl derivatives

CARD: 1/3

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82390

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : are formed, which is proved by oxidation with  
cont'd  $\text{HIO}_4$  and measurement of the specific rota-  
tion. The esters obtained, b.p. in  $^{\circ}\text{C}/\text{mm}$ ,  
m.p. in  $^{\circ}\text{C}$ ,  $n_D^{20}$ ,  $[\alpha]_D^{20}$  in chloroform, are  
enumerated as follows: tetracaproylmethyl- $\alpha$ -  
D-glucopyranoside, 180-190/ $10^{-2}$ -5.10 $^{-3}$ , --,  
1.4559, +87.9 $^{\circ}$ ; tetracapryloylmethyl- $\alpha$ -D-  
glucopyranoside, 205-215/ $10^{-2}$ -5.10 $^{-3}$ , --,  
1.4575, +75.1 $^{\circ}$ ; tetralauroylmethyl- $\alpha$ -D-glu-  
copyranoside, --, 40-41, --, +61.1 $^{\circ}$ ; tetra-

CARD: 2/3

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82390

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : capryloylmethyl- $\beta$ -D-glucopyranoside, --, --,  
cont'd 1.4339 (25 $^{\circ}$ ), -6.1 $^{\circ}$  (17 $^{\circ}$ ); tetralauroylmethyl-  
 $\beta$ -D-glucoside, --; 46-48, --, -5.4 $^{\circ}$  (17 $^{\circ}$ );  
dicaproylmethyl- $\alpha$ -D-glucopyranoside, --, --,  
1.4631, +96.7 $^{\circ}$ ; dilauroylmethyl- $\alpha$ -D-glucopy-  
ranoside, --, 51.5-52.5, --, +73.5 $^{\circ}$ ; mono-  
lauroylmethyl- $\beta$ -D-glucopyranoside (with ad-  
mixture of diacyl derivative), --, 53-57, --,  
-9.1 $^{\circ}$  (17 $^{\circ}$ ).-- A. Yurkevich

CARD: 3/3

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Natural Substances and  
Their Synthetic Analogs  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82397  
AUTHOR : Stanek, J.; Cerny, M.  
INST. : -  
TITLE : On the Formation of Acetylated Derivatives  
of Glycosylamines  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 3, 1017-1019  
ABSTRACT : No abstract.  
See RZKhim., 1958, No 24, No 81741.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Natural Substances and  
Their Synthetic Analogs  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82414  
AUTHOR : Labler, L.; Cerny, V.; Fajkos, J.; Sorm, F.  
INST. : -  
TITLE : On Steroids. XXXIII. Holarrhidine, a New Al-  
kaloid from Holarrhena antidysenterica Wall.  
Labler, L., Cerny, V. XXXIV. The Structure\*  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 2, 370-377, 378-383; No 3, 766-785  
ABSTRACT : No abstract.  
See RZKhim., 1958, No 24, Nos 81782, 81783;  
1959, No 9, No 31508.  
  
\*of Holarrhidine. Cerny, V., Labler, L., Sorm,  
F. XXXV. The Synthesis of Epimeric 16-Bromo  
Derivatives of Androsterone and Testosterone.  
Fajkos, J., Sorm, F.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Natural Substances and  
Their Synthetic Analogs  
ABS. JOUR. : RZKhim., No.23 1959, No.82428  
AUTHOR : Vystroil, A.; Cerny, J.  
INST. : -  
TITLE : Model Substances of Physostigmine  
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 3, 804-808  
ABSTRACT : No abstract.  
See RZnKhim., 1959, No 4, No 11958.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Natural Substances and  
Their Synthetic Analogs  
ABS. JOUR. : RZKhim., No.23 1959, No.82429  
AUTHOR : Mares, F.; Hudlicky, M.  
INST. : -  
TITLE : Synthetic Experiments in the Allolupinane  
Series. V. Synthesis of Allolupinine from  
 $\delta$ -(pyridyl-2)-valeric Acid  
ORIG. PUB. : Chem. listy, 1958, 52, No 10, 1933-1936  
ABSTRACT : Comparatively readily available  $\delta$ -(pyridyl-2)-  
valeric acid (I) (RZnKhim., 1958, No 19, No  
64479) is an appropriate raw material for the  
synthesis of allolupinine (II). The synthesis,  
which gives high yields in most cases, con-  
sists in bromination into the  $\alpha$ -position,  
cyclization by the action of  $\text{Ba}(\text{OH})_2$ , hydro-  
genation, etherification and reduction of the  
carbethoxyl group of  $\text{LiAlH}_4$ . The hydrobromide

CARD: 1/6

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82429

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of I (monohydrate) is obtained after purifi-  
cont'd cation of I by boiling for 3 hours with ske-  
letal Ni in water, oxidation with 48% of  
HBr and evaporation, yield 89%, m.p. 118-119°  
(from acetone). The product (23 g) is tritu-  
rated with 5.6 g of red P, while mixing 280  
g of Br<sub>2</sub> are added by drops, heated for 2  
hours in a water bath, the mixture is poured  
into 500 ml of water, evaporated, the residue  
is alkalized in 500 ml of water with a solu-

CARD: 2/6

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82429

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : tion of 130 g of Ba(OH)<sub>2</sub> in 2.5 l of water,  
cont'd saturated with CO<sub>2</sub> on the second day, fil-  
tered, condensed, and Ba<sup>+2</sup> is precipitated  
with H<sub>2</sub>SO<sub>4</sub>; after concentration, the filtrate  
produced 92% of 1,2-(1'-carboxytetramethylene)-  
pyridine bromide [m.p. 183-185° (from alcohol-  
ether), hygroscopic needles] which, after hy-  
drogenation in water over Pt (from PtO<sub>2</sub>), gave  
the hydrobromide of quinolysidinecarboxylic-4

CARD: 3/6

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82429

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : acid (III acid), yield 93%, m.p. 282-283°  
cont'd (from alcohol-ether). An alcoholic solution  
of the hydrobromide of III at 0° is saturated  
with HCl and boiled for 2.5 hours, alcohol is  
distilled off, the residue is again saturated  
in alcohol of HCl, left standing for 24 hours,  
concentrated, precipitated in CHCl<sub>3</sub> with  
chloroform solution of NH<sub>3</sub> and filtered off.  
By concentration, 52% of ethyl ether of III  
is obtained, b.p. 95-97°/4 mm, n<sub>D</sub><sup>20</sup> 1.4781;

CARD: 4/6

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82429

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : picrate, m.p. 127-128° (from chloroform-ether).  
cont'd The ether obtained by boiling for 1.5 hours  
with LiAlH<sub>4</sub> in ether gave 94% of II, b.p. 86-  
87°/2 mm, n.p. 48-50° (from petroleum ether),  
n<sub>D</sub><sup>20</sup> 1.5121; picrate, m.p. 80-81° (from water),  
after drying, depending on the conditions of  
melting, up to 115-116°. The second method of  
synthesis of II was proposed to start by oxi-  
dation with SeO<sub>2</sub> of 1-(pyridyl-2)-pentanone-4.

CARD: 5/6



COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82429

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : However, the latter proved to be very resis-  
cont'd tant in respect to  $\text{SeO}_2$  and, besides the ini-  
tial ketone, it was not possible to separate  
another substance. Report IV, see RZKhim.,  
1959, No 21, No 75062.-- Jan Kovar

CARD: 6/6

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Natural Substances and  
Their Synthetic Analogs

ABS. JOUR. : RZKhim., No. 23 1959, No. 82430

AUTHOR : Pitha, J.; Ernest, I.

INST. : -

TITLE : Synthetic Experiments in the Allolupinane  
Series. VI. Catalytic Hydrogenation of  
7-(2-pyridyl)-Ketones

ORIG. PUB. : Chem. listy, 1958, 52, No 10, 1937-1940

ABSTRACT : The hydrogenation of 5-(pyridyl-2')-penta-  
none-2 (I) and 5-(pyridyl-2')-pentanol-1-  
one-2 (II) leads stereospecifically to one  
diastereoisomer of quinolysidine substituted  
in the position 4, that is, to 4-methyl-(III)  
or to 4-oxymethylquinolysidine (IV). On the  
basis of mutual correlation, as well as lite-  
rary data, the authors assume that the atoms  
of H under C(4) and C(10) are in the cis-

CARD: 1/7

COUNTRY : G  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82430

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : position. If, as it is assumed by Cookson  
cont'd (RZhKhim., 1953, No 6, No 8549), the confor-  
mation of quinolysidine is analogous to that  
of trans-decalin, then the CH<sub>3</sub>-group in III  
and CH<sub>2</sub>OH-group in IV have an equatorial  
position (regarding nomenclature cf. RZhKhim.,  
1957, No 9, No 30809). By the reduction of  
IV under the action of SOCl<sub>2</sub> and hydrogenation  
into III, the authors established that  
both substances have a similar configuration.

CARD: 2/7

COUNTRY : G  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82430

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Likewise, from the products of hydrogenation  
cont'd of  $\delta$ -(pyridyl-2)- $\alpha$ -ketovaleric acid (V), it  
was possible to prepare a small quantity of  
quinolysidinecarboxylic-4 acid (VI), identical  
with the acid described in the previous  
report (see abstract No 82429). Since both  
IV (substance obtained in the present work,  
and allolupinine described in the previous  
report) are identical, the described diaste-

CARD: 3/7

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82430

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : reoisomer VI also belongs to the  $\alpha$ -series.  
cont'd By the hydrogenation of I over Pt (from PtO<sub>2</sub>)  
in 0.25 n. HCl, III is prepared, b.p. 76-78°/  
12 mm, n<sup>20</sup><sub>D</sub> 1.4793. II with a yield of 42%,  
n<sup>20</sup><sub>D</sub> 1.5289, is prepared by reduction of  
ethyl ether of  $\delta$ -(pyridyl-2)- $\alpha,\alpha$ -diethoxy-  
valeric acid of LiAlH<sub>4</sub> by boiling for 40 min  
in ether and hydrolysis of the impure product  
by two-hour standing in 1 n. HCl at 20°. By  
the hydrogenation of II (as it was shown

CARD: 4/7

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82430

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : above), 95% oil is obtained which, after chro-  
cont'd matography on Al<sub>2</sub>O<sub>3</sub>, gave IV, m.p. 47.5-49°,  
n<sup>20</sup><sub>D</sub> 1.5118; picrate, m.p. 81° (from water),  
121.5-123.5° (after drying in vacuum); hydro-  
chloride, m.p. 240° (from petroleum-ether  
fraction). The ether fraction produced a  
small quantity of the substance, isomeric IV,  
with m.p. below 30°, the structure of which  
was not determined. Hydrochloride of IV is

CARD: 5/7

COUNTRY :  
CATEGORY : G

ABS. JOUR. : RZKhim., No.23 1959, No. 82430

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : heated for 4 hours to 80° with SOCl<sub>2</sub> and 68%  
cont'd of the hydrochloride of 4-chlormethylquino-  
lysidine, m.p. 242°, is obtained which, by  
hydrogenation in water over Pd/BaSO<sub>4</sub> in the  
presence of KHCO<sub>3</sub>, produced 65% of III; pic-  
rate, m.p. 192.5-194°, a mixed melting tem-  
perature without depression. The hydrogenation  
of V is effected as was described earlier  
(see RZhKhim., 1958, No 3, No 7975); from  
the mother solutions, after crystallization

CARD: 6/7

COUNTRY :  
CATEGORY : G

ABS. JOUR. : RZKhim., No. 23 1959, No. 82430

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of esters, an ethyl ether, VI (6%), is sepa-  
cont'd rated chromatographically; picrate, m.p.  
130.5-132°.-- Jan Kovar

CARD: 7/7

COUNTRY : RUMANIA G  
CATEGORY : Organic Chemistry. Natural Substances and  
Their Synthetic Analogs  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82443

AUTHOR : Kirca, M.; Voinescu, V.; Hendler, E.  
INST. : -  
TITLE : On the Synthesis of  $\beta$ -Alanine

ORIG. PUB. : Rev. chim. (RPR), 1959, 10, No 2, 78-79

ABSTRACT : The preparation of  $\beta$ -alanine (I) according to the scheme: acrylonitrile  $\rightarrow$  acrylamide (II)  $\rightarrow$  polymer II  $\rightarrow$  I. 106.12 g of acrylonitrile are gradually added to 196 g of 80%  $H_2SO_4$  (+hydroquinone) at 60-80°, heated for about 45 min at 90-100°, diluted with 400 ml of butanol and refluxed with  $NH_3$  up to pH 7,  $(NH_4)_2SO_4$  is filtered off at 50° and from the cooled filtrate II is obtained, yielding 101 g. The method is suitable for use in

\*is described

CARD: 1/3

COUNTRY : G  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82443  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : continuous processes. The mixture of 100 g  
cont'd of II, 8 g of the powder of NaOH (or 30 ml of 30% alcoholic solution of tritan B) and 0.05 g of hydroquinone is heated to 70° (after 1-2 min polymerization begins and the temperature rises to 220°), dissolved in 400 ml of 50%  $H_2SO_4$ , boiled for 3 hours, neutralized with  $Ba(OH)_2$ , the filtrate is condensed,  $CH_3OH$  is added to the residue and

CARD: 2/3

COUNTRY :  
CATEGORY :

G

ABS. JOUR. : RZKhim., No.23 1959, No. 82443

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : I is obtained, yielding 65%. For polymeriza-  
cont'd tion of II,  $\text{CH}_3\text{ONa}$  may also be applied.-- S.  
Zav'yakov

CARD: 3/3

COUNTRY : CZECHOSLOVAKIA G  
CATEGORY : Organic Chemistry. Natural Substances and  
Their Synthetic Analogs

ABS. JOUR. : RZKhim., No. 23 1959, No. 82444

AUTHOR : Poduska, K.  
INST. : -

TITLE : Amino-Acids and Peptides. XXIII. Preparation  
and Chromatographic Behavior of Some N-Methyl  
Derivatives of DL-Lysine

ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,  
No 3, 1025-1028

ABSTRACT : No abstract.  
See RZKhim., 1958, No 24, No 81802.

CARD: 1/1

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. General  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82472  
AUTHOR : Messing, H.; Barwinkel, O.  
INST. : -  
TITLE : Complex Standardization as a Method of Estab-  
lishing Indigenous Reserves of the Socialist  
Chemical Industry in the GDR.  
ORIG. PUB. : Chem. Technik, 1959, 11, No 3, 116-118  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Engineering.  
ABS. JOUR. : RZKhim., No. 23, 1959, No. 82481  
AUTHOR : Lienerth, A.  
INST. : -  
TITLE : Testing of Equipment for Tightness Operating  
Under Vacuum in the Chemical Industry  
ORIG. PUB. : Magyar kem. lapja, 1958, 13, No 7-8, 275-278  
ABSTRACT : The degree of permeability and tightness of  
packing materials (asbestos, rubber, asbestos  
with graphite) was tested on a distillation  
unit by measuring incremental increase in  
pressure in the apparatus after having them  
evacuated to a required sub-atmospheric  
pressure and blocking off the vacuum pump.  
It was established that pressure builds up  
proportionally with time, and the quantity of  
air entering apparatus may be determined from  
the following equation:  $g = (\gamma^{60/760}) V \Delta P$   
gr/Hr, where  $\gamma$  - density of air in gr/m<sup>3</sup> (at

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82481

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 19°, 760 mm Hg Abs., at relative humidity of  
Con'd 60%; V - internal volume of an apparatus in  
m<sup>3</sup>.  $\Delta P$  - increase in pressure in mm Hg  
Abs./minute (in the range of 0-160 mm Hg Hbs).  
-- A. Yermakova.

CARD:

2/2

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Engineering

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82494

AUTHOR : Prazak, V.  
INST. : -  
TITLE :

Precision of the Overall Purification Efficiency Measurements on the Gas Dedusting Installations

ORIG. PUB. : Sb. Ceskosl. ved. techn. spolecn. zdravotni  
techn. a vzduchotechn. CSAV, 1958, No 2, 89-\*

ABSTRACT : Reviewed are effects resulting from the measurement method employed and from specific type of apparatus used on the determination of an installation's overall efficiency. Presented are instructions pertaining to the selection of an appropriate method and of apparatus for the determination of dust contained in the air before and after the purification or the quantity of dust trapped from a given volume of gas. -- V. Gertovskiy.

\*-102

CARD:

1/1



COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Engineering  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82499  
AUTHOR : Horanyi, R.  
INST. : -  
TITLE : Supercentrifuges Manufactured in Hungary  
ORIG. PUB. : Magyar kem. linja, 1959, 14, No 1, 34-36  
ABSTRACT : Review. - A. Yermakova.

CARD: 1/1

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Engineering  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82500  
AUTHOR : Blauhut, W.  
INST. : -  
TITLE : Development of Equipment Manufacture for  
Chemical Uses. I. Pumps and Compressors.  
ORIG. PUB. : Chem. Techn., 1959, 11, No 5, 227-236  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : CHINA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Chemical Engineering.  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82510  
 AUTHOR : Yuan Li-ch'un  
 INST. : -  
 TITLE : Calculations of Heat Transfer from Saturated  
 Steam to a Circulating Liquid Under Conditions  
 of Flow  
 ORIG. PUB. : Hua hsueh shih chieh, 1958, 13, No 5, 214-217  
 ABSTRACT : The following equation was derived:  

$$\left[ 1 + \frac{KF}{N2Gc} \right] Wc \ln \left[ \frac{(T - t_1)}{(T - t_2)} \right] =$$

$$= KF \tau / N, \text{ where } t_1 \text{ and } t_2 \text{ are initial and}$$

$$\text{final temperatures of liquid in degrees; } T \text{ is}$$

$$\text{temperature of steam in degrees; } K - \text{heat}$$

$$\text{transfer coefficient in } K \text{ cal/m}^2/\text{Hr/degree;}$$

$$F - \text{heat transfer surface area in m}^2; W - \text{quan-}$$

$$\text{tity of liquid in a system in kg; } G - \text{liquid}$$

$$\text{circulation rate in Kg/Hr; } C - \text{specific}$$

$$\text{heat of the liquid in K cal/Kg; } \tau - \text{duration}$$

$$\text{of heating in hours; } N = A(e^A + 1) / [e^A - 1];$$

$$A = KF / (Gc). \text{ Proposed are an analytical and}$$
 CARD: 1/2

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82510  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : graphical methods for the determination of F  
 Con'd or  $\tau$  values. It was established that changes  
 in K and F greatly affect the process only  
 when  $A < 1$ ; when  $> 4.5$  the above changes have  
 practically no effect on the process; the  
 effect of G increases with an increased value  
 of A. -- Sheng Fu.

CARD: 2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Engineering  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82521  
AUTHOR : Michalski, H.; Strumillo, G.; Szapiro, S.  
INST. : -  
TITLE : Determination Method of Packing Height in  
Rectifying Columns  
ORIG. PUB. : Zesz. nauk. Politechn. lodzkiej, 1957, No 16,  
3-14  
ABSTRACT : A method for determination packing height is  
proposed which is based on the results of  
experiments conducted by the authors on a  
laboratory installation and suitable for cal-  
culations of commercial rectifying columns.  
A satisfactory correlation of data is establi-  
shed when employing factors obtained by the  
proposed method as well as data found by the  
others. A satisfactory correlation exists  
also with data obtained by the authors in  
their experiments with different packed colu-  
mns.  
CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Engineering  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82528  
AUTHOR : Szeneszy, L.; Benedek, P.  
INST. : -  
TITLE : Design of a Column for Continuous Chromatog-  
raphy of Gases (Hypersorber)  
ORIG. PUB. : Magyar kem. lapja, 1958, 13, No 10-12, 369-372  
ABSTRACT : Calculation method for the design of continu-  
ous gas chromatography columns is described  
covering 3 alternate processing schemes:  
a) for the separation of a binary mixture;  
b) for the isolation of 3 components from a  
multi-component mixture; c) for the isolation  
of 2 components from a multi-component mix-  
ture. The method of calculation is based on  
the simultaneous use of material balance equa-  
tions, equilibrium data, and the absorption  
kinetics data. This method permits the deter-  
mination of the number of theoretical trays  
CARD: 1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82528

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : required, the feed point location for gaseous  
Con'd mixtures, reflux ratio, and minimum flow rate  
for the absorbent (mols of gas flowing at any  
height of column is assumed to be constant).  
It has been established that experimental  
values of concentration for any of the compo-  
nents present in a mixture, obtained through  
partial oxidation of methane, are in a good  
agreement with those calculated.  
-- A. Yermakova.

CARD: 2/2

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Engineering  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82538

AUTHOR : Beushausen, W.  
INST. : -  
TITLE : Fine Particle Grinding and Particle Classi-  
fication in the Air Stream

ORIG. PUB. : Chem. Techn., 1959, 11, No 4, 190-200

ABSTRACT : The review of design of apparatus employed  
for particle grinding presenting bases for  
their classification into groups. Presented  
also are bases for classification of solid  
particles in the stream of air with infor-  
mation pertaining to the design and con-  
struction of certain centrifugal type clas-  
sifiers.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Instruments and Automation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82555  
AUTHOR : Milewski, B.  
INST. : -  
TITLE : Control of Chemical Processes With the Use of  
Proportioning Pumps  
ORIG. PUB. : Chemik, 1959, 12, No 1, 17-19  
ABSTRACT : A brief description of an automatic liquid  
feeding system for process equipment with the  
aid of proportioning pumps (PP) (either reci-  
procating or diaphragm type). The rate control  
of PP is achieved directly, eliminating the  
use of any valving arrangements, simply by  
changing stroke of PP or by changing rpm of  
a motor drive. The necessary rate changes (in  
stroke or rpm) of PP are attained through the  
use of electrical-pneumatic or hydraulic mo-  
tors, commonly used in the automatic control  
technique. These servomotors may be coupled  
CARD: 1/3

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82555  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : directly to regulators of any size. In such  
Con'd a system PP becomes receiver of control im-  
pulses. With the use of PP it is also possible  
to establish an automatic control of reactors  
fed with several different liquids, supplied  
at different rates and in different propor-  
tions. Such a system employs a single drive  
that activates a number of PP the stroke of  
each of which is appropriately adjusted to  
give a required piston displacement corres-  
ponding to the required rate for a given com-  
ponent. By changing speed of rotation of the  
CARD: 2/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82555

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : main dive, feed rate of all the components fed  
Con'd are regulated simultaneously, without changing  
proportion of the components charged.  
-- Yu. Skoretskiy

CARD: 3/3

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Instruments and Automation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82561  
AUTHOR : Zenaty, G.; Lezatka, J.  
INST. : -  
TITLE : Automatic Control and Measurment of Feed  
Charged into a Rotary Kiln

ORIG. PUB. : Stavivo, 1959, 37, No 1, 14-15

ABSTRACT : For the purpose of maintaining a constant  
level of solids charge ahead of the bucket  
elevator, an electrode system, involving a  
two position control, is being employed. This  
control operates a motor that activates a  
device that pinches rubber tube through which  
the solids are being fed. -- Ye. Stefanovskiy

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Instruments and Automation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82566  
AUTHOR : Ambrozy, A.  
INST. : -  
TITLE : Electron c Control of Temperature

ORIG. PUB. : Meres es automat., 1959, 7, No 1, 12-19

ABSTRACT. : A number of alternate schemes of electronic control of temperature are reviewed. These control instruments are built with the use electron tubes as well as with semi-conductor devices. Optimum conditions of thermocouple bridge adjustment made of resistance thermometers are established. -- M. Lyndmirskiy

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Instruments and Automation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82568  
AUTHOR : Campan, T.; Anghelache, D.  
INST. : -  
TITLE : Thermocouples for Measurment of Surface  
Temperatures

ORIG. PUB. : Bul. Inst. politehn. Iasi, 1958, 4, No 12,  
365-370

ABSTRACT : The described thermocouple has a silver plate between the electrodes of a 0.15 mm thickness, mounted on cork that acts as thermal insulation. The time required to record a measurment is 20 seconds. -- Z. Khaimskiy

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Instruments and Automation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82571

AUTHOR : Sourek, R.; Recka, A.  
INST. : -  
TITLE : Continuous Recording Colorimetric Analyzer  
for the Control of Oxygen Content in the Inert  
Gases

ORIG. PUB. : Chem. promysl, 1959, 9, No 2, 71-75

ABSTRACT : Described is a photoelectric colorimeter de-  
veloped by the authors for the determination  
of O<sub>2</sub> in the inert gases. The range of deter-  
minations is from 0.002 to 0.03 vol.% O<sub>2</sub>, sen-  
sitivity of 0.0005 vol % O<sub>2</sub>.  
-- Ye. Stefanovskiy.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Instruments and Automation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82572

AUTHOR : Kaliszan, J.  
INST. : -  
TITLE : Commercial Instruments for the Potentiometric  
Measurment of pH

ORIG. PUB. : Chemik, 1959, 12, No 1, 46-47

ABSTRACT : A brief review of the structural features  
of pH measuring instruments. -- Yu. Skoretzkiy

CARD: 1/1



COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Instruments and Automation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82573  
AUTHOR : Fiala, S.  
INST. : -  
TITLE : Measurment and Control of Feed Water pH Values

ORIG. PUB. : Automatisace, 1958, No 10, 328-333

ABSTRACT : Description of a scheme and presentation of  
structural data of the pH measuring and con-  
trolling device used on boiler feed water.  
-- Ye. Stefanovskiy

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Instruments and Automation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82574  
AUTHOR : Asman, O.; Vocetka, J.  
INST. : -  
TITLE : Control Instruments for Low Degree of Automa-  
tion.

ORIG. PUB. : Automatizace, 1959, 2, No 2, 54-57

ABSTRACT : Presented are flow diagrams and technical  
characteristics of the simplest two-position  
level controllers (ball float type) and pre-  
ssure controllers (dianhragm type), equipped  
with mercury switch contact points. These  
instruments are being manufactured by ZPA  
(commercial control instrument factory in  
Praga). -- Ye. Stefanovsky

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Instruments and Automation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82575  
AUTHOR : Ales, P.; Wenig, J.  
INST. : -  
TITLE : Temperature Controller for Generators

ORIG. PUB. : Sklar a keramik, 1958, 8, No 11, 336-337

ABSTRACT : The content of steam in the air supply is controlled automatically by the air-steam mixture temperature that activates a thermostat. The latter is connected into a bridge hook-up, which through an electronic relay, activates a motor driven device that controls steam flow. -- Ye. Stefanovskiy

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Corrosion. Corrosion \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82597  
AUTHOR : Durmala, Z.  
INST. : -  
TITLE : Strength Limits Under Tension at Elevated Temperatures, "The Rate of Growth" and Oxygen\*

ORIG. PUB. : Prace Inst. odlewn., 1958, (1959), 8, No 1-58  
1-31

ABSTRACT : Certain properties of the following different grades of cast iron (C) have been investigated at elevated temperatures: common gray (CC) modified with ferrosilicon (75% Si) (MC), spherical (SC) and low chromium (LC). It was established that with temperature increase almost with every grade of not annealed C,  $\sigma_b$  decreases, with the minimum value occurring in  
\*Corrosion of Various Grades of Cast Iron Manufactured in the Country, Based on the Investigations Conducted by the Foundry Institute.

CARD: \*Control.

1/6

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82597

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the range of 100-200°. This is followed by an  
Con'd increase of  $\epsilon_b$ , that reaches its maximum  
value at approx. 400°. As temperature is in-  
creased above 400°,  $\epsilon_b$  decreases. The greatest  
change of  $\epsilon_b$  is noted in the case of CC and  
MC at 500-600°, in the case of LC at 600-700°,  
and in the case of SC the decrease of  $\epsilon_b$  is  
observed already at 300°. Actual changes of  $\epsilon_b$   
at temperatures up to 400-450° are insignifi-  
cant, at 600°  $\epsilon_b$  decreases by about 50%, at  
700° by approx. 85%. The values of  $\epsilon_b$  for va-  
rious grades of C that were annealed at 400,

CARD: 2/6

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82597

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 500, 600 and 700° in a normal atmosphere, as  
Con'd a rule, are lower than those of not annealed  
samples. The decrease of  $\epsilon_b$  is greater the  
greater is the annealing temperature. The  
decrease in  $\epsilon_b$  can barely be observed for  
LC, while the behaviour of CC and MC in this  
respect is almost identical. The values of  
 $\epsilon_b$  for all grades of C, annealed in the at-  
mosphere of flue gases, go through a minimum  
at 200-300° and a maximum at 400-500°, above  
500°  $\epsilon_b$  falls very rapidly. The greatest drop

CARD: 3/6

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82597

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of  $G_b$  in these instances occurs with SC and  
Con'D the smallest with LC.  $G_b$  values after anneal-  
ing in the atmosphere of flue gases are lower  
than those for the samples annealed in normal  
atmosphere. "The rate of growth" of C was ob-  
served at temperatures  $> 400^\circ$ . No difference  
in "the rate of growth" of CC and MC was noted.  
The effect of annealing atmosphere (flue gases)  
on the rate of growth was observed only at  
 $700^\circ$ . Data pertaining to the stability of va-  
rious C grades against the gas corrosion re-  
vealed analogical trends obtained in the study

CARD: 4/6

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82597

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of the rate of growth of C. A considerable  
effect of gas corrosion was observed at  $700^\circ$   
temperature. Studies of C structures indica-  
ted that the degree of "the rate of growth"  
and of oxidation of C depend on the transition  
of pearlitic structure into ferritic with  
simultaneous graphitization. As a result of  
the conducted study in the temperature range  
up to  $400^\circ$  it is possible to employ CC and MC,  
without fearing "the rate of growth" and in  
so doing to allow a possibility of lowering  
 $G_b$  by 15%. For services of C at  $400-500^\circ$

CARD: 5/6

COUNTRY :  
CATEGORY : H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82597

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : temperatures it is recommended to employ SC  
Con'd and LC with 0.5-0.75% C, at 500-600° tempera-  
tures - LC with Cr content of 1.0-1.5%, and  
for services at 600-700° - LC with Cr content  
of 1.5 - 2.0%. -- V. Levinson.

CARD: 6/6

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Corrosion. Corrosion \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82608

AUTHOR : Kis, J.  
INST. : -  
TITLE : Corrosion Protection of Pressure Tankage  
Employed in Chemical Industry

ORIG. PUB. : Magyar kem. tanja, 1958, 13, No 3, 84-88

ABSTRACT : Principles of design and exploitation of tan-  
kage, operating under pressure, the system  
employed in their technological application  
and current maintenance are presented. The  
supersonic method of their testing is consi-  
dered the best method by the author.  
-- D. Pyushpeki.

\*Control.

CARD: 1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Corrosion. Corrosion \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82618  
AUTHOR : Ch'en Hsueh-shiao  
INST. : -  
TITLE : Protective Coating for Metals (An Alkali-Free  
Process)  
ORIG. PUB. : Hua hsueh shih chieh, 1958, 13, No 11, 508-516  
ABSTRACT : No abstract.

CARD: \*Control.  
1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Corrosion. Corrosion\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82618  
AUTHOR : Weber, J.  
INST. : -  
TITLE : Study of Non-Scale Forming Solution for Phos-  
phatizing.  
ORIG. PUB. : Prace Inst. mech., 1959, 7, No 25, 69-76  
ABSTRACT : Addition of  $H_2C_2O_4$  and its salts into a phos-  
phatizing (P) bath tends to prevent forma-  
tion of scale in the P process. Thus obtained  
films (PF) do not affect mechanical properties  
of lacquer layers applied over them. The  
quality of PF deteriorates with the increased  
concentration of  $H_2C_2O_4$  and the promoter  
( $NaNO_3$ ,  $NaNO_2$ ,  $NaClO_3$ ). The non-scaling so-  
lutions may be employed for P of Zn-Al alloys.

CARD: \*Control.

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82618

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Such solutions are also applicable for P of  
Con'd Al. Corrosion resistance of PF obtained from  
non scaling solutions, particularly at ele-  
vated temperatures (500), is lower than of PF,  
obtained from common baths. -- V. Levinson.

CARD: 2/2

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Corrosion. Corrosion\*

ABS. JOUR. : RZKhim., No. 23 1959, No. 82620

AUTHOR : Forrai, M.  
INST. : -  
TITLE : Basic Principles Involved in the Use of Acid-  
-Resistant Linings

ORIG. PUB. : Magyar kem. lapja, 1959, 14, No 1, 29-33

ABSTRACT : This article reviews the basic methods employ-  
ed in lining concrete storage capacities:  
treatment of concrete with specific chemicals  
(soluble water glass and others), application  
of special insulating coverings (paraffin,  
asphalt and others) on the wall surface, co-  
vering the insulating layer with ceramic  
liners. -- D. Pyushneki

\*Control.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Corrosion. Corrosion \*  
ABS. JOUR. : RZKhim., No. 23 1959, No.82628  
AUTHOR : Biestek, T.; Web er, J.  
INST. : -  
TITLE : Accelerated Corrosion Tests of Phosphate  
Films on Steel  
ORIG. PUB. : Prace Inst. mech., 1959, 7, No 25, 77-85  
ABSTRACT : The results of tests conducted with phosphste  
films (PF) on steel, obtained from baths of  
different composition indicate that the cor-  
rosion resistance (CR) of PF, covered with in-  
protective lacquer layers, increases with in-  
creased PF thickness. Superior CR possess PF  
obtained from solutions of "Mazhef" or "Perkar  
2" salts ( $ZnHPO_4 + H_3PO_4 + Cu$  salt). PF, obtai-  
ned from other, including the non-scale for-  
ming solutions, possess considerable lower CR.  
\*Control.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82628  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : It is noted that thinner PF, for instance  
Con'd those obtained from non-scale forming solu-  
tions, have better mechanical properties, as  
compared to other PF, particularly the adhe-  
sive properties. The drop method proved use-  
ful only for testing PF of comparatively grea-  
ter thickness. Of the accalaterated testing me-  
thods the most rugged and rapid is that per-  
formed with the use of a salt chamber, the  
least rugged - the test performed in humid  
atmosphere. -- V. Levinson.  
CARD: 2/2



COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Corrosion. Corrosion\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82630  
AUTHOR : Galcso, I.; Nemeth, J.  
INST. :  
TITLE : Methods Employed in the Testing of Acid-Resis-  
tant Enamel Coatings  
ORIG. PUB. : Magyar kem. lapja, 1959, 14, No 1, 22-28  
ABSTRACT : The authors summarize results of roughly 300  
experiments on the determination of corrosion  
rates of acid-resistant enamel coatings, app-  
lied to steel vessels. In these experiments  
the determinations of weight losses were em-  
ployed. The degree of erosion as a function  
of time, temperature, nature and concentration  
of the reagent and solution pH were determined.  
In addition are described the determination  
methods for the rate of corrosion of acid-re-  
sistant enamel coatings, employed abroad, as  
\*Control.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82630  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : composition, chemical and physical properties  
Con'd of acid-resistant enamels. -- D. Pyushneki

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82643  
AUTHOR : Dzido, Z.  
INST. : -  
TITLE : Oxygen Concentration Control in the Feed Water

ORIG. PUB. : Energetika (Ceskosl.) 1958, 8, No 12, 559

ABSTRACT : A method for continuous determination of O<sub>2</sub> concentration is described. The apparatus consists of a glass Erlenmeyer flask, corked with a rubber stopper, which is provided with thin tubes, through which water being tested enters and leaves the flask. A small highly polished soft iron cylinder is placed inside the flask. The determination of O<sub>2</sub> concentration is made on the basis of the rate of iron corrosion in the investigated and in the control samples of water. -- V. Berenfel'd.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82649  
AUTHOR : Zarebski, H.; Zmudzinska, S.  
INST. : -  
TITLE : pH Alarm for Recycle Water

ORIG. PUB. : Chemik, 1959, 12, No 3, 133-134

ABSTRACT : Described is a somewhat modified scheme against that proposed by the Ural'skiy Scientific Research Chemical Institute. Presented are results of laboratory tests.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82652  
AUTHOR : Prokubek, K.; Sedlarik, L.; Hos, F.  
INST. : -  
TITLE : Sanitary-Hygienic Evaluation of Drinking Water,  
Used in the Rural Sections of the Gotwald  
Oblast.  
ORIG. PUB. : Sb. Ceskosl. akad. zemed. ved. veterin. med.,  
1959, 4, No 2, 105-114  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82672  
AUTHOR : Hunyady, D.  
INST. : -  
TITLE : Purification of Water Containing Radioactive  
Impurities  
ORIG. PUB. : Magyar esitoivar, 1958, 7, No 8, 360-364  
ABSTRACT : A review.

CARD: 1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82675  
AUTHOR : Liu Ting-yung; Liang Wen-chung; Chu Hsiu-ch'an  
INST. : -  
TITLE : Desalting of Water by Ion Exchange Method

ORIG. PUB. : Kao feng tsa t'ung hsun, 1958, 2, No 4, 232-  
-238

ABSTRACT : Presented are results of the laboratory in-  
vestigation of the method involving simulta-  
neous ionization of H-OH and employing poly-  
styrol - highly acidic cation and highly al-  
kaline anion, bound in 1:2 ratio (by volume).

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82682  
AUTHOR : Klamar, E.  
INST. : -  
TITLE : Treatment Problems of Boiler Feed Water

ORIG. PUB. : Energia es atomtechn., 1958, 11, No 11-12,  
709-719

ABSTRACT : Presented are specifications for boiler feed  
water, described are piping layouts, illustra-  
ted by examples.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82683  
AUTHOR : Rosner, W.  
INST. : -  
TITLE : Characteristic Impurities in the Boiler Feed  
Water.  
ORIG. PUB. : Energ. przemysl., 1959, 7, No 1, 5-11  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage  
ABS. JOUR. : RZKhim., No. 23 1959, No.82684  
AUTHOR : Grbic, P.  
INST. : -  
TITLE : Boiler Feed Water  
ORIG. PUB. : Tehnika, 1959, 14, No 2, Masinstvo, 7, No 2,  
32-34  
ABSTRACT : An elementary review.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82697  
AUTHOR : Marth, J.; Muhits, K.; Pato, T.; Parnay, Z.  
INST. : -  
TITLE : Purification of City Effluent Waters With  
Activated Clay  
ORIG. PUB. : Esuletgeveszet, 1958, 7, No 5-6, 239-244  
ABSTRACT : A review of modern achievements.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82698  
AUTHOR : Ganczarczyk, J.  
INST. : -  
TITLE : Simplified Method for Purification of Small  
Volumes of Sewer Water with Activated Clay  
ORIG. PUB. : Gas, woda i techn. sanit., 1958, 32, No 11,  
437-440  
ABSTRACT : A method for purification of sewer water (SW)  
in circulation channels, employed for city  
SW (of small villages having population of  
3000-5000 souls) is described. This method  
permits the purification even of highly con-  
centrated SW. The load on an installation  
of 100-120 gr BPK<sub>5</sub> capacity per 1 m<sup>3</sup> per day;  
the load per 1 gr of activated clay is 0.03-  
-0.1 gr BPK<sub>5</sub> per day; the aeration time is  
2.5-3.5 days; the decrease in BPK<sub>5</sub> > 90%;  
the required surface area per person is 1-2m<sup>2</sup>.

CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82698  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : the power consumption is 0.8 KWH per 1 kg  
Con'd BPK<sub>5</sub>; technical manpower requirements are 2-4  
manhours per week. -- M. Zdybevskaja  
CARD: 2/2

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82703  
AUTHOR : Savic, I.  
INST. : -  
TITLE : New Design for the Commercial Effluent  
Stream Pretreatment Installations  
ORIG. PUB. : Iz gradnja, 1958, 12, No 11-12, 20-22  
ABSTRACT : A review of the present situation (employing  
German data in particular).

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82710  
AUTHOR : Tihanyi, L.  
INST. : -  
TITLE : Design of Containers for Storage of Radioac-  
tive Effluent Waters  
ORIG. PUB. : Epuletgepeszet, 1958, 7, No 5-6, 199-202  
ABSTRACT : Presented are formulas and a nomogram.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Water Treatment. Sewage.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82717  
AUTHOR : Mago, I.  
INST. : -  
TITLE : Purification of Effluent Water from Soda-Lime  
Water Treatment Installations  
ORIG. PUB. : Epuletgepeszet, 1958, 7, No 5-6, 234-238  
ABSTRACT : Presented are data for design and construction  
of settlers.

CARD: 1/1



COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Safety and Sanitation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82727  
AUTHOR : Rottengruber, J.  
INST. : -  
TITLE : Detrimental and Dangerous Substances  
  
ORIG. PUB. : Ochrana pracy, 1959, 14, No 2, 11-17  
  
ABSTRACT : Report on the conference of Specialist of the  
International Bureau of Labor that took place  
on September 13-24, 1958. The following pro-  
blems were discussed at the conference:  
classification of detrimental substances (6  
groups: explosive, spontaneously combustible,  
flamable, poisonous, caustic, radioactive),  
compilation of the basic list of dangerous  
substances, which must have special warning  
markings on packages, discussion of special  
warning sticker samples, problems pertaining  
to transportation of dangerous and detrimental  
  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82727  
AUTHOR :  
INST. :  
TITLE :  
  
ORIG. PUB. :  
  
ABSTRACT : substances, preparation of instructions re-  
Con'd garding the handling of dangerous substances,  
and others. Presented is the list of dange-  
rous substances, developed at the conference,  
and samples of warning markings, which were  
approved by the OON commission in 1958.  
-- T. Brzhevskaya

CARD: 2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Safety and Sanitation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82735  
AUTHOR : Szmaj, E.  
INST. : -  
TITLE : Effect of Glass Dust on Human Organism  
ORIG. PUB. : Ochrana pracy, 1959, 14, No 3, 13-16  
ABSTRACT : See Ref. Zhur.- Khimiya, 1959, No 15, 53870

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Safety and Sanitation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82739  
AUTHOR : Ubl, Z.  
INST. : -  
TITLE : Integrational Method of SO<sub>2</sub> Determination in  
the Air  
ORIG. PUB. : Ceskosl. hyg., 1959, 4, No 1, 49-54  
ABSTRACT : Soxhlet extraction tubes were employed for  
the absorption of SO<sub>2</sub>. The tubes measured  
25 x 100mm and were filled with the solution  
consisting of (parts): 1-anhydrous K<sub>2</sub>CO<sub>3</sub>,  
1-water, 2-glycerin of 1.26 specific gravity.  
The tubes were secured in a holder and were  
exposed for 3-7 days. Contents of the tubes  
were then analyzed. Filtrate, resulting from  
the H<sub>2</sub>O<sub>2</sub> addition was neutralized with a weak  
HCl employing methyl orange followed by oxi-  
dation with concentrated HCl. SO<sub>2</sub> was

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82739

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : determined as sulfate formed upon the addition  
Con'd of 10% BaCl<sub>2</sub>. -- Ye. Stefanovskiy

CARD: 2/2

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Safety and Sanitation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82745

AUTHOR : Garten, H.  
INST. : -  
TITLE : A Protective Device for Hydraulic Presses  
Employed in the Plastics Industry

ORIG. PUB. : Plaste und Kautschuk, 1959, 6, No 2, 56-57

ABSTRACT : Described is a device resembling a guard  
lattice employed for the prevention of acci-  
dents involving the hands. -- A. Semenova.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Safety and Sanitation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82752  
AUTHOR : Beke, B.  
INST. : -  
TITLE : Dust Removal Problems Encountered in the  
Hungarian Cement Plants  
ORIG. PUB. : Energia es atomtechn., 1958, 11, No 11-12,  
742-745  
ABSTRACT : Listed are measures involved in the elimina-  
tion of dust at cement plants, pointing out  
the equipment cost for the dedusting of rotary  
kilns comprises 10-15% of the kiln cost. The  
loss of valuable materials through the exces-  
sive dust on the cement plant in Hungary  
represents approximately 15% of the kiln char-  
ge, which is the result of low caloric value  
of fuel used (4400-5400 kcal/kg). For the  
purpose of utilizing the collected dust it is  
recommended to recycle it back into the kiln.  
The bibliography covers 8 titles.--D.Pyushpeki  
CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Safety and Sanitation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82754  
AUTHOR : Spurny, K.  
INST. : -  
TITLE : A Device for Measuring Aerosol Concentration  
ORIG. PUB. : Pracovni lekar., 1959, 11, No 4, 197-203  
ABSTRACT : The method is based on darkening of the fil-  
ter paper surface when passing aerosol through  
it. The intensity of color is then compared  
visually with standard samples. Experiments  
that established concentration of solid par-  
ticles in aerosol were conducted on smoke  
derived from the combustion of coal and coke.  
Experiments demonstrated applicability of the  
method when the deposition of solid particles  
on the filter ranged from 0.008 to 0.425mg/cm<sup>2</sup>  
For the purpose of improving accuracy and

CARD: 1/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 28 1959, No. 82754

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : extending limits of the device (that comprizes  
Con'd a round filter), it was divided into 4 sec-  
tions, each one having different hydraulic  
resistance. This was acheaved by providing  
porous layers of different thickness. The re-  
sistance of each section was made to decrease  
in peometrical progression from the periphery  
to the center. Operation of the filter when  
based on the air rates obtained from previous  
experiments (the quantity of air passing  
through each section for a given interval of  
time) and on the degree of darkening, produces

CARD: 2/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 28 1959, No. 82754

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : accurate results, and permits establishing  
Con'd the concentration of solid particles present  
in aerosols. This method may also be employed  
for the determination of concentration of  
microorganisms, gases and vapors in the air.  
In the latter case, a reaction should take  
place on the surface of filter paper with an  
appropriate change in color.-- V. Berenfel'd.

CARD: 3/3

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Safety and Sanitation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82758  
AUTHOR : Fonyad, T.  
INST. : -  
TITLE : Problems in the Design of Industrial Air Con-  
ditioning Installations. Part III. Structural  
Aspects of Air Conditioning Equipment  
ORIG. PUB. : Epuletgebeszet, 1958, 7, No 5-6, 215-229  
ABSTRACT : Described is the solution of structural aspects  
of air conditioning equipment employed at a  
weaving factory that houses 39000 spindles and  
has an area of 10,000 m<sup>2</sup>. The installation  
comprized of 6 units with the total capacity  
of 600,000 m<sup>3</sup>/hour. All the units were con-  
trolled from a central point. For Part II see  
Ref. Zhur.-Khimiya, 1958, No 24, 82191. The  
bibliography includes 7 references.  
-- D. Pyushpeki.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Safety and Sanitation  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82759  
AUTHOR : Forster, T.  
INST. : -  
TITLE : Individual Air Conditioning Units "Miniklima"  
ORIG. PUB. : Epuletgebeszet, 1958, 7, No 5-6, 248-251  
ABSTRACT : Description of air conditioning system and  
equipment for individual quarters.  
-- D. Pyushpeki.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Elements. Oxides. Mineral\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82775

AUTHOR : Klimecek, R.

INST. : -

TITLE : Absorption of  $\text{SO}_2$  in Water Suspensions of Zinc Hydroxide and Zinc Bisulfite

ORIG. PUB. : Chem. průmysl, 1959, 9, No 2, 57-62

ABSTRACT : The absorption process involving small quantities of  $\text{SO}_2$  (0.3 vol.%) present in the effluent gas stream from the  $\text{H}_2\text{SO}_4$  contact process was investigated employing  $\text{Zn}(\text{OH})_2 + \text{Zn}(\text{HSO}_3)_2$ . The absorption process is presented in the form of a physical  $\text{SO}_2$  absorption dissolution of  $\text{Zn}(\text{OH})_2$ , and a chemical reaction involving:  $\text{Zn}(\text{OH})_2 + \text{SO}_2 + \text{H}_2\text{O} \rightarrow \text{ZnSO}_3 + 2\text{H}_2\text{O}$ . The

\*Acids, Bases, Salts.

CARD: 1/4

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82775

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : formed bisulfate reacts with  $\text{Zn}(\text{OH})_2$  in accordance with the reaction:  $\text{Zn}(\text{HSO}_3)_2 + \text{Zn}(\text{OH})_2 \rightarrow 2\text{ZnSO}_3 + 2\text{H}_2\text{O}$ . The overall absorption rate is determined from the rate of  $\text{Zn}(\text{OH})_2$  dissolution. Experiments were conducted in unpacked columns having crosssectional areas of 0.5 and 1.1  $\text{m}^2$ , and introducing absorbent through sprays. A portion of the suspension is removed from the column bottom and is recirculated in an amount resulting in the overall solution composition of  $\text{Zn}(\text{OH})_2 + \text{ZnSO}_3 + 2.5\text{H}_2\text{O}$ .

CARD: 2/4

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82775

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : It has been noted that the addition of  $ZnSO_3$   
Con'd crystals to the suspension results in an in-  
creased rate of  $Zn(OH)_2$  dissolution reaction,  
that increases, in its turn, the rate of  $SO_2$   
absorption reaction. Presented are equations  
for the determination of the number of trans-  
fer units as a function of gas volume,  $SO_2$   
content, reflux density, quantity of  $SO_2$  pre-  
sent in the inlet and outlet gas streams,  $SO_2$   
content in the absorbing solution and phase  
equilibrium constants. It is noted that the  
diffusion through liquid film is negligible

CARD: 3/4

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82775

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : in comparison with the diffusion through  
Con'd gaseous phase. -- V. Barenfel'd.

CARD: 4/4



COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Elements. Oxides. Mineral\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82779  
AUTHOR : Bota, T.; Tomsa, G.  
INST. : -  
TITLE : Increased Productivity of the Ammonia Synthesis  
Units.  
ORIG. PUB. : Rev. chim. (RPR), 1959, 10, No 3, 154-157  
ABSTRACT : The bottlenecks existing individually in the  
copper-ammonium purification and in the  $\text{NH}_3$   
synthesis are indicated. Described are means  
through which the productivity of the plant  
was increased by 75%.  
\*Acids, Bases, Salts.  
CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Elements. Oxides. Mineral\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82781  
AUTHOR : Constantinescu, M.  
INST. : -  
TITLE : Intensification of the Gas Purification  
( $\text{CO}_2$  Removal) for Ammonia Synthesis.  
ORIG. PUB. : Rev. chim. (RPR), 1959, 10. No 3, 151-153  
ABSTRACT : It was established that in comparison with the  
copper-ammonium carbonate solution the copper-  
-ammonium formate solution (with  $\text{Cu}^+$ ) posses-  
ses greater absorptive capacity (by 60%). The  
absorptive capacity may be increased further  
by lowering temperature to  $0^\circ$ .  
\*Acids, Bases, Salts.  
CARD: 1/1

COUNTRY : Poland H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Elements. Oxides. Mineral\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82794  
 AUTHOR : Akerman, K.; Zmudzinski, B.; Godula, R.  
 INST. : -  
 TITLE : Derivation of Aluminum Oxide Through Leaching  
 of Loose Aluminum Containing Slags with Soda  
 Solutions.  
 ORIG. PUB. : Arch. hutn., 1958, 3, No 4, 255-285  
 ABSTRACT : Slags derived from agglomerate calcination in  
 a rotary kiln or (in an hearth type roasters)  
 of clayey raw materials with anhydrite and  
 limestone containing in the first and second  
 instances respectively (in wt%):  $Al_2O_3$  - 15-17  
 and 23 - 26;  $CaO$  - 55-57 and 50-52;  $SiO_2$  - 18-20  
 and 13 - 15; 70 - 90% of the derived slag pass  
 through the 0.06 mm mesh sieve. Investigations  
 conducted on a semi-commercial scale in the  
 batch type operation revealed that after two  
 \*Acids, Bases, Salts.  
 CARD: 1/2

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82794  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : stage leaching with soda solution approxima-  
 Con'd tely 85%  $Al_2O_3$  can be recovered. The leaching  
 process proceeds without difficulty as the  
 solids tend to settle rapidly. Plugging up of  
 pumps and lines was not noted. The unreacted  
 solids are suitable for the manufacture of  
 cement. Optimum conditions for the precipita-  
 tion of  $NaHCO_3Al(OH)_3$  were also established.  
 The obtained  $Al_2O_3$  contained the following  
 impurities (in wt.%):  $SiO_2$  - 0.00 - 0.15,  
 $Fe_2O_3$  - 0.01 - 0.20,  $Na_2O$  - 0.60,  $CaO$  - 0.00.  
 The bibliography covers 12 references.  
 CARD: 2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Elements. Oxides. Mineral\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82795

AUTHOR : Akerman, K.; Zmudzinski, B.; Dietze, S.; Sakala  
INST. : --  
TITLE : Derivation of Aluminum Oxide by the Continuous  
Leaching of Aluminum Containing Crushable  
Slags with Soda Solution  
ORIG. PUB. : Arch. hutn., 1958, 3, No 4, 287-304

ABSTRACT : Developed were the method and pilot plant  
equipment for leaching of slags having com-  
position indicated in the preceeding article.  
The slags contained leachable Ca aluminates  
of the  $12 \text{ CaO} \cdot 7 \text{ Al}_2\text{O}_3$  type. The leaching ope-  
ration was conducted continuously in 2 stages.  
In the first stage leaching was acheaved with  
the solution leaving the second stage and con-  
taining  $\text{NaHCO}_3$ ,  $\text{NaAlO}_2$  and impurities. In so  
doing a certain quantity of Si was also

\*Acids, Bases, Salts.

CARD: 1/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82795

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : removed. After the filtration the filtrate was  
Con'd subjected to carbonation in a special appara-  
tus. A portion of  $\text{Na}_2\text{CO}_3$  solution obtained in  
the precipitation of  $\text{Al}(\text{OH})_3$  was treated in  
the  $\text{CO}_2$  scrubbers.  $\text{NaHCO}_3$  solution effluent  
from scrubbers was used for the precipitation  
of  $\text{Al}(\text{OH})_3$  in the first leaching stage. Solid  
residue from the first leaching stage was  
treated in the second reactor with the remain-  
ing  $\text{NaHCO}_3$  solution. The total  $\text{Al}_2\text{O}_3$  extrac-  
ted ranged from 75 to 90%. The remaining so-  
lids after the extraction had "Kule's" modulus

CARD: 2/3

COUNTRY :  
CATEGORY :

II

ABS. JOUR. : RZKhim., No. 23 1959, No. 82795

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of 90-100 and were suitable for the direct  
Con'd manufacture of cement. The bibliography in-  
cludes 5 titles.

CARD: 3/3

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Catalysts and Sorbents.

ABS. JOUR. : RZKhim., No. 23 1959, No. 82846

AUTHOR : Tatarskiy, A.  
INST. : -  
TITLE : Possibility of Drying Vanadium Catalyst While  
Heating and Passing Air over It.

ORIG. PUB. : Khimiya i industriya (Bulg.), 1958, 30, No 5,  
153-154

ABSTRACT : It has been established that for drying vana-  
dium catalyst it is possible to employ undried  
air. In the blowing of spent catalyst or of  
fresh catalyst, that has not been in use for  
a prolonged period of time, it has to be hea-  
ted up to 350° followed by blowing with ordi-  
nary air. -- V. Matveyev.

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Electrochemical Industries\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82858

AUTHOR : Creanga, O.; Bunus, F; Burnei, M.; Neumann,\*\*

INST. : -

TITLE : Application of Vertical Decomposers in the  
Electrolysis of Sodium Chloride

ORIG. PUB. : Rev. chim., 1958, No 7-8, 370-373, Discut., 373

ABSTRACT : The apparatus consists of a vertically mounted  
cylinder with a convex bottom, divided into  
4 vertical sections. Wire baskets are fitted  
inside these sections. They are filled with  
granulated graphite (2.5 cm in diameter), pre-  
activated with iron salts ( $\text{FeSO}_4$ ,  $\text{FeCl}_2$ ) at  
800° temperature. Diameter of the cylinder is  
480 mm, height is 1200 mm, load is 10,000 a.  
Amalgam effluent from the cell is moved into

\*Electroplating. Galvanic Cells.

\*\*F.; Mihalcescu, S; Petcu, I.; Poltoratchi, V.

CARD: 1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 82858

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : a decomposer, from which Hg flows by gravity  
Con'd into the electrolytic cell. The use of verti-  
cal decomposers permitted the reduction of Hg  
quantity contained in the baths from 1037 to  
579 gr. -- N. Kirichenko.

CARD: 2/2

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Electrochemical Industries\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82863  
AUTHOR : Mladenovic, S.  
INST. : -  
TITLE : Treating Baths for Deciling

ORIG. PUB. : Zast. mater., 1958, 6, No 11, 455-457

ABSTRACT : A review. Presented are compositions of bath's  
solutions for the chemical and electrochemical  
deciling of Fe, steel, Cu and its alloys, Al  
and its alloys, Sn, Pb, Mg and its alloys to-  
gether with treating conditions. -- G. Kossyiy

\*Electroplating. Galvanic Cells.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82904  
AUTHOR : Arkosi, K.; Barna, J.  
INST. : -  
TITLE : Study of Hungarian Kaolins with the Aid of  
Electron Microscope

ORIG. PUB. : Epitoanyag, 1959, 11, No 1-2, 32-33

ABSTRACT : No abstract.

\*Materials. Concrete.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82905

AUTHOR : Juhasz, Z.  
INST. : -  
TITLE : Study of Sepilongskiy Kaolin

ORIG. PUB. : Emutoanyag, 1959, 11, No 1-2, 17-27

ABSTRACT : In the study of Sepilongskiy kaolin used for  
the manufacture of refractories for the re-  
duction of cracking tendency, occurring at 900°,  
it is proposed to add 20% illite to the raw  
mix.

\*Materials. Concrete.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82908

AUTHOR : Varju, G.  
INST. : -  
TITLE : Conditions Under Which Fire-Resistent Clays  
of the Pilish Mountain Region Were Formed and  
Technological Characteristics of the Clay.

ORIG. PUB. : Banyasz. kutato, int. kozl., 1957, 2, No 2,  
133-140

ABSTRACT : No abstract.

\*Materials. Concrete.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82910  
AUTHOR : Pawlikowski, S.; Pollo, I.; Starczewski, M.  
INST. : -  
TITLE : Investigation of a Possibility of Employing  
Indigenous Andesite in the Manufacture of  
Acid-Resistent Solutions.  
ORIG. PUB. : Przem. chem., 1959, 38, No 2, 105-107  
ABSTRACT : No abstract.

\*Materials. Concrete.  
CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82912  
AUTHOR : Pospisil, Z.  
INST. : -  
TITLE : Bases of pH Measurment of Ceramic Masses and  
of Raw Materials.  
ORIG. PUB. : Sklar a keramik, 1959, 9, No 3, 78-80  
ABSTRACT : On the basis of investigations performed by  
the Scientific Institute of Electrochemical  
Ceramics (Gradec-Kralevo, Czechoslovakia) des-  
cribed is the pH determination method recom-  
mended for routine laboratories of ceramic  
plants. In the measuring pH the concentration  
of solids should be in the range of 5-15%,  
dry basis. For the pH control the use of po-  
tentiometric electronic pH meter "Multoscope

\*Materials. Concrete.  
CARD: 1/4



COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82912

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : III" is recommended. It is based on the deviation of anode current principle detected on the grid of an electron tube. The accuracy of a determination is  $\pm 0.1$  pH. A more accurate instrument ( $\pm 0.01$  pH) is the electronic pH-meter, based on the principle involving the compensation of voltage. Both instruments may be used for pH measurement with the aid of a glass electrode, having sufficient accuracy or with a hydrogen electrode. The former one is more convenient in handling. For the periodic check of the pH meters it is recommended

CARD: 2/4

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82912

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : to use 2 standard solutions for the duration of one to several weeks. Such solutions should be capable of maintaining constant pH. One of these solutions (pH of 4.62 at 20°) consists of 50 cm<sup>3</sup> of 1 n. CH<sub>3</sub>COOH, neutralized with NaOH (using thymol blue as indicator) until the solution turns green; to the solution are then added 50 cm<sup>3</sup> of 1n. CH<sub>3</sub>COOH, diluted with distilled water up to 500 cm<sup>3</sup> volume. The second solution is prepared in the following manner: 0.999 gr of dried Na<sub>2</sub>CO<sub>3</sub> + 1.175 gr Na<sub>2</sub>O · 2 B<sub>2</sub>O<sub>3</sub> are dissolved in 250cc

CARD: 3/4

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82912  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : water. At 20° pH of the solution is 10.0. The  
Con'd methods of measuring with the use of indica-  
tors are less accurate than the potentiomet-  
ric method, since the introduction of indica-  
tors as such changes pH of the solids. --  
-- S. Glebov  
CARD: 4/4

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82933  
AUTHOR : Stebel, F.  
INST. : -  
TITLE : Production of Refractories With Increased  
Al<sub>2</sub>O<sub>3</sub> Content  
ORIG. PUB. : Hutn. listy, 1959, 14, No 3, 273-276  
ABSTRACT : Presented is the experience in the production  
of stopper from a mass, having 20% Al<sub>2</sub>O<sub>3</sub>  
added to the diluent, with subsequent Al<sub>2</sub>O<sub>3</sub>  
addition to the binding agent. This experi-  
ence extends to the production of refractory  
bricks employed for the protection of covers  
of the heating ducts and regeneration cham-  
bers of Martens' furnaces. The above articles  
are noted for improved refractory properties  
and mechanical strength at elevated tempera-  
tures.  
\*Materials. Concrete.  
CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82953  
AUTHOR : Albert, J.  
INST. : -  
TITLE : Pearled Insulating Materials Employed in the  
Ceramics Industry  
ORIG. PUB. : Epitoanyag, 1959, 11, No 1-2, 1-16  
ABSTRACT : Study of "Pearlite" and its applications as  
insulating material in the manufacture of ce-  
ramics, usable at 900-1350° temperatures.

\*Materials. Concrete.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82958  
AUTHOR : Zaboklicki, W.  
INST. : -  
TITLE : Study of Hydrocyclones in the Enrichment of  
Indigenous Kaolins  
ORIG. PUB. : Szkło i ceramika, 1959, 10, NO 3, 80-82  
ABSTRACT : A detailed description of commercial experi-  
ments performed on the wet enrichment of Be-  
leslevetzkiiy (mined at "Mariya", Vroslavskiy  
district, PDR) with the use of hydrocyclones  
(HC), operating at the porcelain factory  
imeni Revolyutsiya 1905 in Vroslavsk. The  
enriched kaolin fully met the required spe-  
cifications and conformed with technical  
conditions for quality and was found suitable  
for the ceramic and paper industries. The

\*Materials. Concrete.

CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82958  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : obtained results with regard to enrichment of  
Con'd kaolin with the use of HC are employed as ba-  
sis in the design of a kaolin enriching plant  
to be located at the "Mariya" mine. --S.Glebov.  
CARD: 2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 82959  
AUTHOR : Augustyn, D.  
INST. : -  
TITLE : Brown Coal Humic Acids as Cutters for Ceramic  
Masses  
ORIG. PUB. : Prace Glown. inst. gorn., 1957, B, No 192,  
8s., il.  
ABSTRACT : Investigation of a possibility of employing  
ammoniacal solutions of humic acids, derived  
from brown coal, as cutting agents for high-  
-quality ceramics.

CARD: \*Materials. Concrete.  
1/1

COUNTRY : YUGOSLAVIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Ceramics. Glass. Binding\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82987  
 AUTHOR : Bojovic, P. Ristic, M.  
 INST. : -  
 TITLE : Investigation of Glass and Ceramics with the  
 Aid of Radioactive Isotopes  
 ORIG. PUB. : Tehnika, 1959, 14, No 2, Hem. ind., 13, No 2,  
 25-28  
 ABSTRACT : Radioactive isotopes were employed as emanation  
 sources and as indicators in the establishment of the reaction constants, in the  
 investigation of certain ions' diffusion rates in the glass, in the study of surface flow  
 characteristics of glass masses contained in tub ovens, in the control of glazings' application on ceramic objects, etc. --L. Sedov.  
 \*Materials. Concrete.  
 CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Ceramics. Glass. Binding\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 82991  
 AUTHOR : Spitz, T.  
 INST. : -  
 TITLE : Melting and Clarifying of the Glass Mass with  
 the Use of Sodium Sulfate  
 ORIG. PUB. : Sklara keramik, 1959, 9, No 2, 35-39  
 ABSTRACT : The effect of sodium sulfate on melting and  
 clarifying of glass masses, used in the production sheet glass was studied employing the  
 static and dynamic weight thermal analyses method, the differential thermal method, the  
 method involving measurement of the wetting angle of sand by the glass mass and observations of the conical samples' deformation. It  
 was found that at temperatures up to 900° small dosages of sodium sulfate added do not  
 \*Materials. Concrete.  
 CARD: 1/2

COUNTRY :  
CATEGORY : H

ABS. JOUR. : RZKhim., No. 23 1959, No. 82991

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : affect the rate of reaction. Molten sulfate promotes wetting of sand grains with glass mass. The optimum  $\text{Na}_2\text{O}$  content in sulfate for clarification comprizes 0.3%, whereby in an oxidizing atmosphere the process proceeds most favorably. The bibliography covers 15 references. -- L. Sedov.

CARD: 2/2

COUNTRY : ROUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83001

AUTHOR : Popovici, N.; Grigoriu, A.  
INST. : -  
TITLE : Determination of Quality of Glassware Manufactured in Rumania

ORIG. PUB. : Rev. chim. (RPR), 1959, 10, No 12, 115-117

ABSTRACT : Results of the determination of chemical stability of glass ampoules with respect to water acid and alkali. It was established that the tested ampoules are chemically stable with respect to water and acid but are less stable to the action of alkali.

\*Materials. Concrete.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83004  
AUTHOR : Gollenhofer, A.  
INST. : -  
TITLE : Indigenous Production of Cast Ladle Used for  
Melting of Optical Glass  
ORIG. PUB. : Szklo i ceramika, 1959, 10, No 2, 44-48  
ABSTRACT : The production of ladles for melting of optical glass has been started in Poland. Ladles are manufactured employing casting technique in gypsum forms reinforced by steel frames. A mixture prepared in Verner's mixer is poured into forms, leaving it there for 6-8 days to set. After the removal from forms ladles are dried at 25-30° temperature and at a relative humidity of 60-65% followed by calcination at 1000° in a tunnel or in a chamber oven, increasing temperature consequently to 1430°.  
\*Materials. Concrete.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83004  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : The possibility of utilizing indigenous clays  
Con'd was established together with the formulation of raw material blends and selection of operating conditions for the manufacture of ladles for optical Glass melting. --L. Sedov.

CARD: 2/2

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83008  
AUTHOR : Knapn, G.  
INST. : -  
TITLE : Modern Structural Glass

ORIG. PUB. : Technika (Magyar), 1959, 3, No 3, 5

ABSTRACT : Brief description of various modern structural glass types employed for glassing in the windows ("thermex", "kontrasol", "thermopan"), as insulating and panneling material ("penosteklo"), for the construction of buildings ("profile" glass). Other expanding applications include the use of glass wool and glass plastics. -- S. Tipol't.

\*Materials. Concrete.

CARD: 1/1

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83010  
AUTHOR : Hubscher, M.  
INST. : -  
TITLE : Glass Containing Little Alkalies or No Alkalies and Boron Used for the Manufacture of Glass Wool and Other Objects.

ORIG. PUB. : Silikattechnik, 1959, 10, No 2, 88-90

ABSTRACT : A review of glass compositions containing either little alkalies or no alkalies and boron at all with the description of their properties as based on literature data and patents. The bibliography includes 6 references -- S. Iofe.

\*Materials.

CARD: 1/1



COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83014  
AUTHOR : Swietlik, W.  
INST. : -  
TITLE : Diagram of the Production Process of a Glass  
Factory  
ORIG. PUB. : Szklo i ceramika, 1959, 10, No 3, 63-68  
ABSTRACT : Presented is the detailed analysis of manufac-  
turing process from the standpoint of a) orga-  
nization, b) effects on working personnel and  
c) division of the manufacturing process into  
its component parts. -- L. Sedov.  
\*Materials. Concrete.  
CARD: 1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83018  
AUTHOR : P'an Nan-ken  
INST. : -  
TITLE : The Degree of Whiteness of Titanium Enamels as  
a Function of Its Obtainment Methods  
ORIG. PUB. : Hua hsueh shueh chieh, 1959, 14, No 1, 16-17  
ABSTRACT : In order to prevent the decrease in whiteness  
of the titanium enamels it is recommended to  
lower iron content of the raw material to a  
minimum and to conduct calcination at 1250-  
-1400° temperatures.  
\*Materials. Concrete.  
CARD: 1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83049  
AUTHOR : -  
INST. : -  
TITLE : Computation of Ingredients for the Production  
of Cements Containing Lime.  
ORIG. PUB. : Chien chu ts'ai liao kung yeh, 1958, No 21,  
29-30  
ABSTRACT : No abstract

CARD: \*Materials. Concrete.  
1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83050  
AUTHOR : T'an Ch'ing-lin  
INST. : -  
TITLE : Manufacture of Cement and Sulfuric Acid from  
Gypsum  
ORIG. PUB. : Hua hsueh shih chieh, 1958, 13, No 12, 540-541  
ABSTRACT : In the burning of gypsum at temperatures  
exceeding 1000° a large quantity of SO<sub>2</sub> is  
generated. It can be employed for the manu-  
facture of H<sub>2</sub>SO<sub>4</sub>. The residual CaO is reacted  
with clay, that is a portion of the mixture,  
forming cement. The best results were obtain-  
ed with the following proportion of compo-  
nents present in a mixture (in %): clay-10,  
gypsum-77, anthracite-13.

CARD: \*Materials. Concrete.  
1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83054  
AUTHOR : Shen Chieh  
INST. : -  
TITLE : Characteristics of Hydronhobic Additives  
Employed in the Manufacture of Cement in  
China  
ORIG. PUB. : Yeh chin chien scheh, 1959, No 3, 18-21  
ABSTRACT : No abstract.

\*Materials. Concrete.

CARD: 1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83056  
AUTHOR : Shih Ying  
INST. : -  
TITLE : Testing of the Acid Resistant Silicon Cement  
Employed as a Solution for Lining  
ORIG. PUB. : Hua hsueh shih chieh, 1958, 13, No 12, 549-550  
ABSTRACT : No abstract.

\*Materials. Concrete.

CARD: 1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83059  
AUTHOR : Ch'en Nien-i  
INST. : -  
TITLE : Use of High Titanium Slags in the Manufacture  
of Cement  
ORIG. PUB. : Hua hsueh shih chien, 1958, 13, No 5, 205-206  
ABSTRACT : No abstract.

CARD: \*Materials. Concrete.  
1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83073  
AUTHOR : Wu Sheng-Kuang  
INST. : -  
TITLE : Introduction of Lime and Water Into Concrete  
Mixtures Lowers Consumption of Cement  
ORIG. PUB. : Shui li fa tien, 1958, No 18, 9-13  
ABSTRACT : No abstract.

CARD: \*Materials. Concrete.  
1/1

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83088

AUTHOR : Pajevic, M.  
INST. : -  
TITLE : Cellular Concrete - Modern Material of Construction

ORIG. PUB. : Nase gradjev., 13, No 1, 5-11

ABSTRACT : Review of qualities of the cellular concrete  
and the situation with regard to its manufacture  
in various countries of the world --  
-- M. Stepanova.

CARD: \*Materials. Concrete.  
1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Ceramics. Glass. Binding\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83094

AUTHOR : Kubala, M.  
INST. : -  
TITLE : Production of Slag Pumice In Foam Ducts of  
the VUSH - 3 System

ORIG. PUB. : Stavivo. 1959, 37, No 4, 114-116

ABSTRACT : No abstract.

CARD: \*Materials. Concrete.  
1/1

COUNTRY : CHINA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Ceramics. Glass. Binding\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83096  
 AUTHOR : Ch'en Wen-i  
 INST. : -  
 TITLE : Simplified Method of Laying Down High Melting  
 Point Asphalts  
 ORIG. PUB. : Hua hsueh shih chieh, 1958, 13, No 12, 545-547  
 ABSTRACT : Presented is the method of laying down asphalt  
 at 250-280° temperature. Dependence between  
 the softening point, heat transfer, laying  
 down time and cooling time is reviewed.  
 \*Materials. Concrete.  
 CARD: 1/1

COUNTRY : HUNGARY H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Industrial Organic Synthe\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83112  
 AUTHOR : Haidegger, E.; Szebenyi, I; Szekely, A.  
 INST. : -  
 TITLE : Solubility of Individual Components of Methane  
 Partial Oxidation in Dimethylformamide  
 ORIG. PUB. : Magyar kem. folyoirat, 1958, 64, No 10, 365-  
 -371  
 ABSTRACT : Absorbtion at equilibrium conditions of indi-  
 vidual components of the product gas resulting  
 from partial oxidation of methane (C<sub>2</sub>H<sub>2</sub>, CO<sub>2</sub>,  
 CH<sub>4</sub>, CO, H<sub>2</sub>, N<sub>2</sub>) in dimethylformamide(I) was  
 studied at 5, 20, 40° and in the pressure  
 range of 40 - 1000 mm Hg. Abs. Described is  
 the processing scheme and procedure of the  
 experiments. It was established that water  
 content of I lowers considerably its  
 \*sis.  
 CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83112

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : absorptive capacity. As for example, when water content is increased from 0.2 to 2.0% absorbtion of  $C_2H_2$  drops off (at  $20^\circ$  and 760 mm) by 6%, at a water content of 5% it drops off by 21%, at 6.8% by 31%. The authors consider that, with economics permitting, the water content of I (in the main scrubber) should not exceed 0.2 - 0.3%.-- S. Rosenfel'd.

CARD: 2/2

COUNTRY : GDR  
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Industrial Organic Synthesis\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83115

H

AUTHOR : Thurzo, G.  
INST. : -  
TITLE : Laboratory and Pilot Plant Production of Vinyl Monomers from Gases Containing Low Concentrations of Acetylene.  
ORIG. PUB. : Chem. Technik, 1959, 11, No 2, 90-93

ABSTRACT : A routine control and a semi-commercial method of derivation of vinyl chloride (I) was developed employing petroleum refinery gases containing 7-8%  $C_2H_2$  (II). I is separated from the reaction mixture in such a way that its content in the residual mixture of CO and  $H_2$  is suitable for subsequent syntheses. Experiments were conducted employing gas, containing 8% II, 25% CO, 4%  $CO_2$ , 53%  $H_2$ , 1% air and 9% HCl. As catalyst (III) was employed (in wt %):

\*sis.

CARD: 1/4

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 28 1959, No. 83115

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 17.5 Hg Cl<sub>2</sub> + promoter, 17.5 BaCl<sub>2</sub> and 10 HgCl<sub>2</sub>  
Con'd + promoter 20 TiO<sub>2</sub> on the activated carbon (AC)  
CH<sub>4</sub> was not introduced into the entering mixture as at temperatures < 200° it does not affect the degree of II to I conversion. The highest conversion was attained with TiO<sub>2</sub> as promoter: 100% at 120° and at a space velocity of 91 l/hr. and 98-99% conversion at 150° and at a space of 182 l/hr. With further increase in space velocity the conversion drops off. At a 100% and 98% conversion (with the yield of I of 49.5 and 48 gr per 1kg III at 120° and at

CARD: 2/4

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 28 1959, No. 83115

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : 182 l/hr. space velocity) the life of III comprises respectively 120 and 300 hours. Upon further use of III the conversion and yield of I decrease. The separation of I is possible by means of condensation at low temperatures, by solvent absorption, and by adsorption on AC. The latter method was investigated employing mixtures, containing 8-10% I and AC as super-sorbent. The highest degree of adsorption (prior to saturation) occurred at 20° and comprised 240 gr I per 1 kg AC. Presented are

CARD: 3/4



COUNTRY :  
CATEGORY : H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83115

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : curves representing conversion of II as a  
Con'd function of gas velocity at 120, 150 and 180°  
and of catalyst life as well as curves showing  
yields of I obtained at the above temperatures,  
adsorption isotherms of I on AC at 20, 40 and  
60° as a function of I concentration. Presented  
also is process diagram of a semi-commercial  
installation. -- Ya. Kantor.

CARD: 4/4

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitamins.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83242

AUTHOR : Varcovici, H.  
INST. : -  
TITLE : Aerosols Containing Medicinal Preparations

ORIG. PUB. : Farmacia (Romin.), 1958, 6, No 4, 295-303

ABSTRACT : Reviewed is the technique of introducing  
medicinal preparations (MP) in the form of  
aerosols, the proposed apparatus for this pur-  
pose and properties of individual MP groups  
from the standpoint of a possibility of their  
application as aerosols (adrenalin, alkaloids,  
sulfamides, antibiotics and other groups).  
Presented is the formulation of individual  
aerosols, their composition, test methods  
and storage conditions. MP, employed in the  
form of aerosols, must satisfy the following  
\* Antibiotics.

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83242

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : requirements: they must irritate mucus membra-  
Con'd nes of the respiratory organs, must desorb ea-  
sily. For liquids the maximum allowable dosage  
must be contained in 1 ml of the preparations;  
if aerosol is used as a powder, dosage of the  
active substance (finely ground and non-hygro-  
scopic) must be greater than 1-3 gr. The bib-  
liography covers 13 references. -- G. Marcus.

CARD: 2/2

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitamins\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83245

AUTHOR : Levi, M.; Georgiev, A.  
INST. : -  
TITLE : Technological Derivation Method of Hydrazin  
Sulfate from Urea

ORIG. PUB. : Tr. N-i. in-t. farmatsiya, 1957, 1, 47-49

ABSTRACT : The reaction of urea with sodium hypochlorite  
solution was studied as a function of tempera-  
ture conditions and of concentration and pre-  
sence of inhibitors. On the basis of the above  
study a technological method for derivation  
of hydrazin sulfate was developed resulting  
in the yield of 45%. This method is superior  
to that employed at the chemico-pharmaceutical  
factory.

\*Antibiotics.

CARD: 1/1

COUNTRY : BULGARIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Pharmaceuticals. Vitamins\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83247  
 AUTHOR : Markov, S.  
 INST. : -  
 TITLE : Derivation of Five Major Alkaloids From  
 "Papaver Somniferum" Poppies  
 ORIG. PUB. : Tr. N-i. in-t farmatsiya, 1957, 1, 93-95  
 ABSTRACT : It is reported of a new method for the deriva-  
 tion of morphine, codein, papaverin, tebain and  
 narcotin from stalks or from "opium tar" of  
 poppies. The following are characteristic fea-  
 tures of this method: 1) the extraction work  
 is conducted with safe and available solvents  
 in simple apparata; 2) extraction processes are  
 simplified and 3) the method is equally appli-  
 cable to the separation of papaverin, codein,  
 tebain and narcotine as from the ion exchange  
 effluent as well as from the opium tar extracts  
 \*Antibiotics.  
 CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Pharmaceuticals. Vitamins.\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83250  
 AUTHOR : Babulova, A.; Ditteova, V.; Selecky, F.  
 INST. : -  
 TITLE : Determination of Vitamin D Biological Activity  
 in Pharmaceutical Preparations  
 ORIG. PUB. : Farmacia (Ceskosl.), 1958, 27, No 7, 194-200  
 ABSTRACT : In the comparison of different determination  
 methods of Vitamin D biological activity it  
 was found that the most suitable method is  
 one that determines ash content of the bones  
 and the roentgenoscopic test applied to fat-  
 free bones of the investigated animals.  
 -- I Matveyeva.  
 \*Antibiotics.  
 CARD: 1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitamins\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83251  
AUTHOR : Hsin Ting- hsi  
INST. : -  
TITLE : Methods of Extraction of Berberin Chlorhydrate  
from Oriental Arbor-Vitae

ORIG. PUB. : Chiang hsi chun iyao, 1958, No 10, 35-38

ABSTRACT : Experiments on the extraction of berberin  
chlorhydrate were conducted employing water-  
alcohol solution of varying concentration. It  
was established that the highest yield is ob-  
tained when extraction is performed with an  
acidified 60% alcohol. In the crystallization  
from 95% alcohol yellow needles of berberin  
chlorhydrate are obtained. -- Shen P'ei-ken.

\*antibiotics.

CARD: 1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitamins\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83252  
AUTHOR : Ivanov, P.; Ivanova, L.  
INST. : -  
TITLE : Study of Pimpinella Saxifraga L.

ORIG. PUB. : Tr. N-i. in-t farmatsiya, 1957, 1, 80-81

ABSTRACT : Bluesh-violet essential oil was found in the  
roots of the above mentioned plant. Quantity  
of this oil represented 0.70%. Ether number  
is 127.8 and specific gravity is 0.972. The  
oil possesses blood vessel dilating characte-  
ristics to a greater extent than does papave-  
rin, kellin and "Ol. Anisi".

\*Antibiotics.

CARD: 1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitamins.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83254

AUTHOR : Popdimitrov, K.; Subeva, V.  
INST. : -  
TITLE : Study of Derivation of Trypsin

ORIG. PUB. : Tr. N-i. in-t farmatsiya, 1957, 1, 144-146

ABSTRACT : Autocatalysis of pancreas gland in the presence  
of 1%  $\text{CaCl}_2$  leads to the derivation of active  
amorphous trypsin (4.8-5.6 gr yield per 1kg of  
pancreas gland). The product is usable for  
medicinal purposes.

\*Antibiotics.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitamins\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83263

AUTHOR : Sarsunova, M.  
INST. : -  
TITLE : Determination of  $\text{KNO}_3$  in the Pure Form and in  
the Form of an Isotonic Additive in Eye Drops  
Containing Ag-Diacetylalbuminate by Means of\*\*  
ORIG. PUB. : Ceskosl. farmac., 1958, 7, No 8, 440-442

ABSTRACT : With the use of ion exchange chromatography,  
a simple and accurate micro-method was deve-  
loped for the determination of  $\text{KNO}_3$  in the  
pure form and as isotonic additive present in  
the "intargol" eye drops. The method consists  
in the binding of  $\text{K}^+$  and in the adsorption of  
Ag-diacetylalbuminate on a cation exchange  
substance, Extraction of  $\text{HNO}_3$  from  $\text{KNO}_3$  and

\*\*Ion Exchange Chromatography.

\*Antibiotics.

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83263

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : in its determination by titration with 0.01n. NaOH, while employing a mixed indicator. Advantages of the method are: a small quantity of required substance, ease and accuracy of the Ag-diacetylalbuminate determination, that prevents possibility of an error in the determination of  $\text{KNO}_3$ , that may be polluted with other potassium salts.

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitamins\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83267

H

AUTHOR : Blazek, J.  
INST. : -  
TITLE : Quantitative Determination of Diethyl-n-Nitrophenylphosphate (Soluble "Mintacol")

ORIG. PUB. : Ceskosl. farmac., 1958, 7, No 8, 455-456

ABSTRACT : A rapid determination method of the above substance was developed based on the reduction of the nitro-group into amino-group in acid medium by refluxing with Zn dust. (heating with the use of reflux condenser). The formed primary aromatic amino-group is titrated potentiometrically with 0.01 M.  $\text{NaNO}_2$  solution with the use of two electrodes (platinum and graphite), which are directly connected to a galvanometer. 1 ml of 0.01 M.  $\text{NaNO}_2$  solution

\*Antibiotics.

CARD: 1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 83267

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : corresponds to 2.752 mg of diethyl-n-nitrophenylphosphate. Content of the latter in the preparation must be at a level of 1.66%. Error of the method does not exceed 2%.  
Con'd

CARD: 2/2

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Pharmaceuticals. Vitamins\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83268

AUTHOR : Kolusheva, A.; Morozova, A.  
INST. : -  
TITLE : Quantitative Determination of Camphor in the Form of Oxycamphor

ORIG. PUB. : Tr. N-i. in-t faratsiya, 1957, 1, 152-153

ABSTRACT : Refer to Ref. Zhur. - Khimiya, 1958, No 5, 14248

\*Antibiotics.

CARD: 1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitamins\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83270

AUTHOR : Kolusheva, A.; Nin'o, N.

INST. : -

TITLE : Analytical Control Method of the Technological  
Production Process for Isonicotinic Acid  
(HINA)

ORIG. PUB. : Tr. N-i. in-t farmaziya, 1957, 1, 160-163

ABSTRACT : Developed is an analytical quantitative method  
for the determination of anti-tubercular pre-  
paration - hydrazid of isonicotinic acid (I)  
as well as of intermediate products of its  
synthesis: 1)  $\gamma$ -ethylpyridine by its oxidation  
with  $K_2Cr_2O_7$  up to iso-nicotinic acid (II) and  
titration of the excessive quantity of  $K_2Cr_2O_7$   
with Mohr's salt or with a solution of  $I_2$ ;  
2) II, by precipitation from a neutral medium  
with predetermined quantity of  $CuSO_4$  and

\* Antibiotics.

CARD: 1/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83270

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : iodometrical determination of the remaining  
Con'd quantity of the latter; 3) methyl and ethyl  
esters of II: a) by saponification with KOH  
alcoholic solution and b) refractometrically  
(esters are extracted from a neutral medium  
with  $CHCl_3$  followed by the determination of  
the refractive index of the chloroform extract  
4) quantitative determination methods of I:  
a) colorimetrically with the aid of 1-chloro-  
-2, 4-dinitrobenzene and b) bromometrically

CARD: 2/3



COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83270

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and argentometrically (hydrolysis of I up to  
Con'd II and oxidation of the hydrazid residue to  
nitrogen).

CARD: 3/3

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitamins\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83272  
AUTHOR : Kolusheva, A.; Nin'o, N.  
INST. : -  
TITLE : Colorimetric Method for Quantitative Determination of "Cardiazol"

ORIG. PUB. : Tr. N-i. in-t farmatsiya, 1957, 1, 150-151

ABSTRACT : See Ref. Zhur.-Khimiya, 1958, No 14, 47810

CARD: \*Antibiotics.  
1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitamins\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83278

AUTHOR : Nin'o, N.  
INST. : -  
TITLE : Colorimetric Determination Method of Ephedrine

ORIG. PUB. : Tr. N-i. in-t farmatsiya, 1957, 1, 172

ABSTRACT : Ephedrine (I) is determined quantitatively, utilizing its color reaction with freshly prepared Fraude reagent (0.1 gr ammonium molybdate in 10 ml concentrated  $H_2SO_4$ ). The reaction proceeds when pure I is used with an accurately measured volume of the reagent while heating for 10 min. on a steam bath. The obtained stable green coloring, follows the Lambert's law in the range of 0.005-0.04 gr I in 5 ml of solution. By means of a Pulfrich refractometer equipped with S60 filter (No 3) the maximum of I absorption is established, this permitted

CARD: 1/2

\*Antibiotics.

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 83278

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : also to plot calibration curves and the curve  
Con'd for absorption of I. The method is applicable  
for the determination of I in the ampoule  
I-cardiazol solutions without preliminary separation of the latter. In the determination of I in other pharmaceutical mixtures it is necessary to extract I with ether.

-- A. Vavilova.

CARD: 2/2

COUNTRY : RUMANIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Pharmaceuticals. Vitamins\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No.83280  
 AUTHOR : Bercevic, M.  
 INST. :  
 TITLE : Fluorometric Determination of B<sub>2</sub> Vitamin in  
 Medicinal Preparations in the Presence of Other  
 Vitamins.  
 ORIG. PUB. : Rev. chim., 1958, 9, No 6, 335-337  
 ABSTRACT : Developed is a method of quantitative deter-  
 mination of B<sub>2</sub> vitamin (I) in vitamin prepa-  
 rations, based on the ability of I to fluoresce  
 in ultra-violet light when present in a neu-  
 tral or in a weak acid medium with the inten-  
 sity proportional to I concentration. Determi-  
 nations are conducted in a Pulfrich's fluoro-  
 photometer. In the development of the fluores-  
 cence calibration curve a 0.02 gr sample of  
 riboflavin, maintained at 105° for 2 hours, was  
 dissolved while heating in 100 ml of 0.02 n.  
 CH<sub>3</sub>COOH. To 10 ml of solution were added 3 ml  
 CARD: 1/3  
 \*Antibiotics.

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83280  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : of buffer solution (pH = 7), followed by di-  
 Con'd lution with distilled water up to 100 ml in  
 volume. The obtained solution contained  
 20  $\mu$ /ml of I. 1, 2, 3 and 4 ml were further  
 diluted with distilled water to 5 ml volume  
 followed by the determination of fluorescence  
 intensity. For the determination of I in poly-  
 vitamin pills, from 20 pills an average sam-  
 ple is selected, corresponding (in weight to  
 a single pill. After crushing it, 10 ml of  
 0.02 n. CH<sub>3</sub>COOH is added together with 3 ml  
 of a buffer solution and then diluted to 50ml  
 CARD: 2/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83280

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : with water, followed by shaking, filtration,  
Con'd 2-3 ml of filtrate are then diluted with dis-  
tilled water to 5 ml volume and from the fluo-  
rescence intensity determine I employing the  
calibration curve. Relative accuracy of the  
method is 2.7%. -- G. Markus.

CARD: 3/3

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pharmaceuticals. Vitaminst  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83281

AUTHOR : Ivanov, V., Tomova, M.  
INST. : -  
TITLE : Phytochemical Study and Separation of a Hypo-  
tensive Substance from the Fruit and Roots of  
Siler Trilobum Crantz.

ORIG. PUB. : Tr. N-i. in-t farmatsiya, 1957, 1, 55-58

ABSTRACT : Phytochemical study of the Siler Trilobum  
Crantz was conducted. A number of components  
were discovered and isolated (yields in %):  
1) from roots - essential oil - approx. 0.80,  
sucrose - approx. 9 and a new crystalline  
substance - silerin - 0.10 with the melting  
point of 188-190° (probably a coumarine deri-  
vative of a  $C_{12}H_{28}O_7$  empirical formula). This  
substance proved to be physiologically active  
clearly revealing its hypotensive

\*Antibiotics.

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83281

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : characteristic; 2) from fruits - essential oil  
Con'd with the yield of approx. 4%, the components  
of which are : citrons, perillie, and cuminic  
aldehydes. The essential oil processes a dis-  
tinct physiological activity. Stelerin (yield  
of 0.06%) was also isolated from the fruits.  
3) from the leaves and stock, coumarine deriva-  
tives were not isolated.

CARD: 2/2

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pesticides.

ABS. JOUR. : RZKhim., No. 23 1959, No.

AUTHOR : Novakovic, V.  
INST. : -  
TITLE : National Production and Imports of Chemicals  
for the Protection of Plants in 1959

ORIG. PUB. : Kemija u industriji, 1959, 8, No 2, 43-44

ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : YUGOSLAVIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Pesticides.  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83357  
 AUTHOR : Tominic, A.  
 INST. : -  
 TITLE : Toxicological Tests of "Paratione" and  
 "Diazinone" on Olive Fly  
 ORIG. PUB. : Zashtita bil'ya, 1957, No 43, 55-69  
 ABSTRACT : Duration of the insecticidal action was tested  
 on the olive fly (*Dacus oleae* Gmel) of several  
 insecticides containing esters of phosphoric  
 acid, "paratione" preparations: "emulsion  
 E-605 forte" (I) and paratione, "Ekotox" sus-  
 pension and a "diazine" preparation - "Basudine"  
 emulsion (II) Fruits of the three varieties of  
 cultivated olives and of the wild olive were  
 immersed into solutions of the above prepara-  
 tions and, after a certain interval of time,  
 were infected with the parasite. I in a con-  
 centration of 0.000092% and II in a  
 CARD: 1/2

COUNTRY : YUGOSLAVIA  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Pesticides.  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83357  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : concentration of 0.00006- retain their activi-  
 Con'd ties even for 32 days after treatment. The  
 duration of activity of preparations depends  
 on the variety of olives which is the function  
 of oil content in the fruits.-- K. Bokarev.  
 CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Pesticides.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83373  
AUTHOR : Kralova, E.; Fejlek, M.  
INST. : -  
TITLE : Control of Barn Pests - Borers in Food Products  
ORIG. PUB. : Prumysl potraviny, 1958, No 12, 654-656  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Perfumes and Cosmetics.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83431  
AUTHOR : Nazarie, A.  
INST. : -  
TITLE : New Preparations for the Care of Hair  
ORIG. PUB. : Ind aliment. Prod. veget., 1959, No 1, 9-13  
ABSTRACT : Review of the properties of certain cosmetics  
employed for washing and dyeing of hair, dan-  
druff-combatting preparations and substances  
that prevent the fall of hair. The bibliogra-  
phy covers 26 references. -- A. Marin.

\*Essential Oils.  
CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Processing of\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83467  
AUTHOR : Grjaznov, N.  
INST. : -  
TITLE : New Methods of Coal Pretreatment for Coking

ORIG. PUB. : Paliva, 1958, 38, No 7, 238-243

ABSTRACT : Effect of fine grinding and of other coal (C) pretreatment methods on the quality of coke (K) has been investigated. A new principle for the pretreatment is indicated which consists in fine grinding:- the necessity of decreasing the upper limit of coal particles coarseness with the quantity of fine particles held to a minimum. The method of selective crushing (SC) is characterized in detail resulting in the 3-0 mm size and its

\*Solid Fossil Fuels.

CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83467  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : effectiveness. Presented are flow diagrams  
Con'd for SC of raw charge (R) and its components. Depending on the composition of R and the required K quality, processing schemes include SC or fine grinding and SC with consequent treatment and compacting of R. In certain instances it is permissible to add gas C into R in a 15-25% quantity and as 12-4 mm size particles. Described also is the preliminary preheat of R up to 100-200°, that leads to the increase of density and of structural strength of K and increases the caking rate.  
--Ya. Satunovskiy.

CARD: 2/2



COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Processing of \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83480  
AUTHOR : Wang Yin-jen; Liu P'in-shuang; Ch'en Wen-min  
INST. : -  
TITLE : Dependency of Tar Yield Obtained in Semi-Co-  
king of Certain Chinese Coals on Their Chemi-  
cal Composition  
ORIG. PUB. : Jan liao hsue pao, Acta focalia simica, 1958,  
3, No 1, 35-41  
ABSTRACT : Laboratory yields of tar derived from indige-  
nous brown coals and hard coals were investi-  
gated. Applicability of recent empirical for-  
mulas for the calculation of yields was che-  
cked. A simplified empirical formula was de-  
rived, demonstrating its applicability for the  
calculation of tar yields obtained in the semi-  
coking of Chinese coals. -- Z. Sablina.  
  
\*Solid Fossil Fuels.  
CARD: 1/1

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications, Chemical Processing of \*  
ABS. JOUR. : RZKhim., No.23 1959, No. 83481  
AUTHOR : Leibnitz, E. Naumann, K., Hiller, C.  
INST. : -  
TITLE : Identification of Brown Coal Tar Bases. IV.  
Chromatography of Bases on Paper.  
ORIG. PUB. : Chem. Technik, 1958, 10, No 2, 82-84  
ABSTRACT : Previously obtained fractions of the bases  
III - XXIV (Part III, Ref. Zhur.-Khimiya,  
1958, No 9, 30106) were subjected to oxida-  
tion with SeO<sub>2</sub> in the benzene solution and  
without solvent, as well as with H<sub>2</sub>O<sub>2</sub> in the  
CH<sub>3</sub>COOH solution with subsequent separation of  
the oxidation products with the aid of chro-  
matography on paper. Solvent: butanol-formic  
acid (92%) - water (75 : 15 : 10). The oxida-  
tion with SeO<sub>2</sub> proceeds less intensively and  
  
\*Solid Fossil Fuels.  
CARD: 1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 83481

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : often only up to carbonic acids; chromatographic separation of the product is less sharp.  
Con'd Presented is the list of identified bases.  
Butanol used in chromatography may be substituted with methylketone. -- S. Rosenfel'd.

CARD: 2/2

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Chemical Processing of \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83487

AUTHOR : Todorovic, M.  
INST. : -  
TITLE : Lignites as Raw Materials for Chemical Industry and for the Manufacture of City Gas. Part II.

ORIG. PUB. : Tehnika, 1958, 13, No 1, Hem. ind., 12, No 1, 6-12

ABSTRACT : Discussed are various schemes of utilization of Yugoslavian lignites (L): gassification of common L at its mining location or after drying, at the gas consumption location; production of synthesis gas for the production of ammonia with the utilization of the methane fraction for the diversion into city gas. For Part I see Ref. Zhur.-Khimiya, 1959, No 5, 16769. -- G. Bonvech.

\*Solid Fossil Fuels.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Processing of\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83505  
AUTHOR : Podkowinski, J.; Gliszczynski, J.  
INST. : -  
TITLE : Activated Carbon Obtained on Semi-Commercial  
Scale from Peat (PDR) and Comparison of its  
Quality with that of Indigenous and Foreign\*\*  
ORIG. PUB. : Torf, 1958, 3, No 3, 15-19  
ABSTRACT : Presented are comparative characteristics.  
It is shown that activated carbon (grade "100")  
derived from peat is superior in quality to  
Polish "N" grade, Hungarian "Nuxit BQ" and  
Soviet "AP-3" grade, and is equal in quality  
to the German "Supersorbon" type. Based on its  
high sorption characteristics, with regard to  
benzene and propane, it may find application  
in the chemical and petroleum industries.

CARD: \*Solid Fossil Fuels.  
\*\*Activated Carbons.  
1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83505  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : A conclusion is being made regarding the nece-  
Con'd ssity of producing a large quantity of such  
a carbon for the purpose of verifying its  
applicability on a commercial scale.

CARD: 2/2

COUNTRY : CHINA H  
CATEGORY : Chemical Technology, Chemical Products and  
Their Applications. Chemical Processing of \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83512  
AUTHOR : Pien Mu-tun  
INST. : -  
TITLE : Microanalytical Determination Method of Nitro-  
gen Content in Coal  
ORIG. PUB. : Hua hsueh shih chieh, 1958, 13, No 1, 36-37  
ABSTRACT : A new method for the determination of N<sub>2</sub> in  
coal is recommended. It is a modification of  
the Kjeldahl's method differing from the latter  
in that the analytical sample of solid fuel is  
oxidized with boiling H<sub>2</sub>SO<sub>4</sub> in the presence of  
a catalyst-selenic acid and anhydrous Na<sub>2</sub>SO<sub>4</sub>.  
Through the addition of excess caustic, gase-  
ous NH<sub>3</sub> is generated which is absorbed in boric  
acid solution. Quantity of NH<sub>3</sub> is then deter-  
mined by titration with methyl orange as an  
\*Solid Fossil Fuels.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83512  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT :indicator. Time required to perform a single  
Con'd determination by this method is 3-4 times long-  
ger than when employing the common method.  
-- A. Zonntag.

CARD: 2/2

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology, Chemical Products and  
Their Applications. Chemical Processing of \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83515  
AUTHOR : Georgiyev, Ts.  
INST. : -  
TITLE : Hypersorption Method for the Separation of  
Natural and Artificial Gases  
ORIG. PUB. : Tezhka promishlenost, 1958, 7, No 7, 29-33  
ABSTRACT : Presented is description of the method and of  
basic equipment involved as well as domains  
of its industrial application. The bibliogra-  
phy includes 29 references.

CARD: \*Solid Fossil Fuels.  
1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Processing of \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83530  
AUTHOR : Pikulski, J.  
INST. : -  
TITLE : Tubestill Distillation at one of the Baku  
Refineries  
ORIG. PUB. : Wiadom. naft., 1958, 4, No 4, 88-89  
ABSTRACT : No abstract.

CARD: \*Natural Gases and Petroleum. Motor and Rocket  
Fuels. Lubricants.  
1/1

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Processing of \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83539  
AUTHOR : -  
INST. : -  
TITLE : Plant for the Generation of Gas from Petroleum  
in England  
ORIG. PUB. : Energietechnik, 1958, 8, No 9, 416-422  
ABSTRACT : In connection with the planned expansion in  
the GDR of city gas manufacture from petroleum  
in particular that imported from the USSR,  
described is an operating plant in England,  
that employs the Segas process and produces  
210,000 m<sup>3</sup>/day of gas of 4580 kcal/Nm<sup>3</sup> heating  
value. The plant has 2 trains of gas genera-  
tors, liquid petroleum fractions comprize raw  
feed. For every 1000 kcal in the gas the  
\*Natural Gases and Petroleum. Motor and Rocket  
Fuels. Lubricants.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83539  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : following consumption of petroleum fractions  
Con'd is reported (1): for gas generation - 0.149,  
for steam generation - 0.017; steam consum-  
ption - 0.209 kg; air consumption - 0.763 m<sup>3</sup>;  
water consumption - 182 m<sup>3</sup>/hour.---N.Gavrilov.  
CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Processing of \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83550  
AUTHOR : Staud, M.  
INST. : -  
TITLE : Use of Czechoslovakian Adsorbents for Hyper-  
sorptional Separation of Hydrocarbon Gases  
ORIG. PUB. : Chem. promysl., 1958, 8, No 12, 617-622  
ABSTRACT : Presented are the results of test on the  
attrition, adsorption capacity, selectivity  
and desorption characteristics of five grades  
of indigenous adsorbents (two grades of acti-  
vated carbon - Supersorbon and Bensorbon, clay  
silicagel, and "Aluzil adsorbent clay). Shown  
are advantageous characteristics of both ac-  
tivated carbon grades and particularly of the  
Bensorbon.  
\*Natural Gases and Petroleum. Motor and Rocket  
Fuels. Lubricants.  
CARD: 1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Processing of\*  
ABS. JOUR. : RZKhim., No.23 1959, No. 83584  
AUTHOR : Gerasimov, M.; Rushev, D.; Radoykov, A.  
INST. : -  
TITLE : Synthesis of Antioxidant Oil Additives in  
Bulgaria Derived from Indigenous Raw Materials  
ORIG. PUB. : Tezhka promishlenost, 1958, 7, No 9, 37-40  
ABSTRACT : Experimental investigations of the selection  
of raw materials for the synthesis of anio-  
xidant additives for lubricating oils, that  
could be manufactured from Tyulanovskaya  
crude oil in large quantities. For this nur-  
pose, the 175-200° and 200-230° fractions of  
gas generator tar, wood tar (beech), Dmitrov-  
skiy, Pirinskiy and other semicoking tars,  
and also of Plachkovskiy coal tar were inves-  
tigated. Presented are data that characterize  
Natural Gases and Petroleum. Motor and Rocket  
Fuels. Lubricants.  
CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83584

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : physico-chemical properties of the indicated  
Con'd tars and quality of the transformer oils,  
TM-14, containing additives such as n-oxydi-  
phenylamine, 3-phenoxyphosphine and 43 complex  
additives synthesized, with each being added  
in a quantity equivalent to 0.25%. It is demon-  
strated that a number of obtained additives  
are more effective than individual organic  
compounds. --- Ya. Satunovskiy.

CARD: 2/2

COUNTRY : RUMANIA  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Processing of\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83596

H

AUTHOR : Auslander, G.  
INST. : -  
TITLE : Liquid Density at the Boiling Point and the  
Characterization Factor

ORIG. PUB. : Petrol. si gaze, 1958, 9, No 5, 227-229

ABSTRACT : The dependence between liquid density at  
boiling point ( $d_p$ ) and "characterization fac-  
tor" ( $K_0$ ) is presented. Formula for calcula-  
tion  $K_0$  is given. The established dependence  
is found useful in the determination of the  
presence and quantity of paraffine wax in  
petroleum fractions. ---I. Rozhkov

\*Natural Gases and Petroleum. Motor and Rocket  
Fuels. Lubricants.

CARD: 1/1



COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Product and  
their Applications. Chemical Wood Products\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83687  
AUTHOR : Dimov, K.; Lukanov, T.; Zhulev, S.  
INST. : Khim - technol. Institute  
TITLE : Experiments in the Obtainment of Furfural from  
Sunflower Seed Hulls

ORIG. PUB. : Godishnik Khim.-tekhnol. in-t, 1957(1958), 4  
No 1, 43-53  
ABSTRACT : Experiments were conducted with the purpose of  
establishing optimum conditions for the pre-  
-hydrolysis step and subsequent obtainment of  
the maximum yield of furfural (I) with the  
condition that the derived cellulose (C) will  
be suitable for chemical treatment. It was  
demonstrated that with the increase of hydro-  
-modulus by a factor of 2 (from 3 to 6) the  
yield of I increases rapidly while the ash and

\*Hydrolysis Industry.

CARD: 1/3

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83687  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : pentozane content in the solid residue decrea-  
Con'd ses respectively by 27 and 75%. This is accom-  
panied by an intensive destruction of C (the  
degree of polymerization (DP) is 543 at a  
hydro-modulus of 1 : 3 and 389 at 1 : 6). Gre-  
ter portion of pentozanes (80.5%) and of ash  
(45.5%) is being removed at the lowest hydro-  
-modulus. In so doing a substantial destruc-  
tion of C occurs while the yield of I from  
pentozanes remains unsatisfactorily low  
(approx. 32%). The most suitable hydro-modulus

CARD: 2/3

COUNTRY :  
CATEGORY : H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83687

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : level is 4.5 - 5.0 at which the yield of I is  
Con'd 36.9% and the obtained C is suitable for chemical refining (CR=417). The yield of I increases when I is removed from the reaction mixture at a high rate.

CARD: 3/3

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Chemical Wood Products \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83689

AUTHOR : Buguslawska, K.  
INST. : -  
TITLE : Neutralization of Sulfite Lixivium

ORIG. PUB. : Przegl. papiern., 1959, 15, No 4, 122-123

ABSTRACT : It is recommended to neutralize sulfite lixiviums with calcite when the former is used for the manufacture of alcohol. At an active acidity of lixiviums, in order to raise pH from 2.5 to 5.0, 10 kg of calcite, containing 92.2%  $\text{CaCO}_3$ , is required per  $\text{lm}^3$  of lixivium. The question of removal and of further utilization of the sediment has not been solved yet. This sediment is obtained in the neutralization in the quantity of 30 kg on wet basis (or 4 kg - dry basis).-- Ye. Gurvich.  
\*Hydrolysis Industry.

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fats and Oils. Waxes. \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83704  
AUTHOR : Ruckenstein, C.  
INST. : -  
TITLE : Reduction of Losses in the Refining of Vegeta-  
ble Oils.  
ORIG. PUB. : Rev. ind. aliment. prod. vegetale, 1958, No 2,  
9-10  
ABSTRACT : The necessity of attaining the following points  
is indicated: 1) precise measurement of vessel  
volumes for the refined oil (RO) and accurate  
accounting of the incoming as well as RO while  
performing  $\geq 1$  times every 24 hours of the fol-  
lowing tests on RO: the determination of the  
ether insoluble substances content, water con-  
tent, volatile substances (at 105°), gel-like  
substances and phosphatides; 2) thorough se-  
paration of RO from the impurities and its  
\*Soaps and Detergents. Flotation Agents.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83704  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : treatment with an electrolyte; 3) use of  
Con'd optimum process conditions; 4) particular  
attention to be devoted to the operation of  
the vacuum unit and the use of steam in the  
deodorization with the subsequent reduction  
of time in it; 5) to employ condensate in the  
washing of RO (95-97°); 6) compulsory emplo-  
yment of filtration for the pressed oil and an  
attempt to find ways of employing filtration  
for oil obtained by extraction; 7) proper  
maintenance of the equipment avoiding losses  
in all the manufacturing operations. --A.Marin  
CARD: 2/2

COUNTRY : POLAND H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Fats and Oils. Waxes.\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83713  
 AUTHOR : Kwapniewski, Z.; Rutkowski, A.; Kubik, B.  
 INST. :  
 TITLE : Effect of Paper Wrapping on the Stability Fats  
 ORIG. PUB. : Przem. spozywczy, 1958, 12, No 10-12, 412-415  
 ABSTRACT : Conducted were experiments pertaining to the  
 investigation of the effect of wrapper porosity  
 and of the presence of iron and copper in the  
 wrapping material on the degree of self-oxida-  
 tion of fatty products and of the effect of  
 employing wrapping paper, saturated with anti-  
 oxidant (A) solution. Five types of wrapping  
 paper were investigated: parchment, semi-par-  
 chment, acidic parchment, white and brown card-  
 board. Paper or/and cardboard was finelly  
 \*Soaps and Detergents. Flotation Agents.  
 CARD: 1/4

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83713  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : pulverizwd into mill, employing emery wheel,  
 Cen'd followed by mixing with molten fat (F) in the  
 proportion of 5 gr of mill per 95 gr F. The  
 mixture was left standing in a beaker within  
 a thermostatically controlled oven at 60° tem-  
 perature. Simultaneously, a sample of F con-  
 taining no paper mill was subjected to the  
 same conditions. Periodically, the peroxide  
 number was determined on both samples. As a  
 measure of stability, a certain interval of  
 time was considered during which the peroxide  
 number of a sample reached certain  
 CARD: 2/4

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83713

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT

Con'd

: predetermined value. It was established that the fastest rate of oxidation occurs with samples of F containing parchment and acidic parchment paper. Effect of different grades of paper on the increase of free fatty acids content was not noticed. For the purpose of revealing the effect of paper structural characteristics on the stability of F, 1 gr F, dissolved in 5 ml of petroleum ether, was placed on a piece of paper measuring 11x7.5 cm. After the evaporation of petroleum ether, paper samples (suspended on nylon threads) were exposed to

CARD:

3.4

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83713

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT

Con'd

: diffused day light at 13°-18° temperature. The fastest rate of self-oxidation was noted with F applied to white and gray cardboard, wherein the rate of F oxidation on cardboard at 13-18° was greater than that of F admixed with ground paper that was stored at 60°. This fact points to a larger negative effect resulting from the porosity of wrapping. Experiment involving the application of F on paper samples, impregnated with A solution (0.01% by weight of paper) revealed the distinct effect of A on the retardation of the F oxidation process.

-- M. Zemlyanykhina

CARD:

4/4

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fats and Oils. Waxes. Soaps\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83731  
AUTHOR : Moch, R.  
INST. : -  
TITLE : Chemical Cleaning Process

ORIG. PUB. : Faserforsch. und Textiltechn., 1959, 10, No 3,  
129-137

ABSTRACT : Result of an investigation of the surface-active and physical properties (surface tension, density, viscosity) of waterless detergent solutions, employed in chemical cleaning. The study included effect of small quantities of water added to waterless detergent solutions. Structures of the micells in aqueous and in waterless solutions, mechanism of the conjugated dissolution of hydrophylic and

\*and Detergents. Flotation Agents.

CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83731  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : hydrophobic substances, occurring with the aid  
Con'd of micell interaction are revealed. The article discusses employment of substances, promoting the conjugated dissolution as substances termed the intensifiers of chemical cleaning.  
-- A. Zinov'yev.

CARD: 2/2

COUNTRY : POLAND H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Carbohydrates and Their\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83739  
 AUTHOR : Srzednicki, Z.  
 INST. : -  
 TITLE : Institutes of Beet Culture and Sugar Manufacture  
 in the GDR  
 ORIG. PUB. : Gaz. cukrown., 1959, 61, No 1, 31-32  
 ABSTRACT : The Educational Technological Institute of  
 sugar industry affiliated with the Humboldt  
 University trains personnel for sugar refine-  
 ries. The institute operates with full coope-  
 ration of sugar refineries. In recent years a  
 number of research projects have been comple-  
 ted (investigations covered organic acids,  
 contained in the diffused and purified juices,  
 physical and chemical properties of sugar so-  
 lutions encountered in the manufacture of  
 \*Processing.  
 CARD: 1/3

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83739  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : sugar, and others). Institute of Beet Culture  
 Con'd has also been founded in the GDR. It has 5  
 divisions: seed-growing laboratory, seed-grow-  
 ing in the field, biochemical, fitopathalo-  
 gical, and genetic divisions. The research  
 work comprizes studies of mono-steam and poly-  
 ploidal beet seeds, studies of specific qua-  
 lity seeds of various grades. The third insti-  
 tute in GDR - The Central Institute of Bio-  
 logy - has the following sections: botanical,  
 plant hygiene, prognostics, zoological and  
 CARD: 2/3

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 83739

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : virus. The most interesting works of this in-  
Con'd stitute pertain to problems involving the  
handling of beet pests.

CARD: 3/3

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Carbohydrates and Their\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83740

AUTHOR : Hangyal, K.  
INST. : -  
TITLE : History of the Ercsi Sugar Refinery

ORIG. PUB. : Cukorivar, 1959, 12, No 2, 33-38

ABSTRACT : No abstract.

\* Processing.

CARD: 1/1



COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Carbohydrates and Their\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83741  
AUTHOR : Ehrenkranz, D.  
INST. : -  
TITLE : The Role of Colloids in the Sugar Industry  
  
ORIG. PUB. : Rev. ind, aliment. plod. vegetale, 1958, No 12  
13-17  
ABSTRACT : A review article. Reviewed are major colloids  
encountered in the manufacture of sugar (cel-  
lulose, hemicellulose, pectin substances, ara-  
ban, proteins, neptons and others), quantities  
of colloids contained in beets and in the in-  
termediate products of the manufacture, their  
effect on the manufacturing process and basic  
way of preventing their appearance and elimi-  
nating their action in the manufacturing pro-  
cessing steps.-- D. Bronsheyn  
  
\*Processing.  
CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Carbohydrates and Their\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83743  
AUTHOR : Oplatka, G.  
INST. : -  
TITLE : A New Continuous Diffuser "J"  
  
ORIG. PUB. : Cukoripari kutatoint. kozl., 1956, 3, No 1, 44  
-52  
ABSTRACT : See Ref. Zhur.-Khimiya, 1957, No 18, 62256  
and also 1959, No 4, 13397.  
  
\*Processing.  
CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Carbohydrates and Their\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83745  
 AUTHOR : Burianek, J. Slechtova, D.  
 INST. : -  
 TITLE : Purification of Sugar Solutions by Electrodialysis with the Aid of Ionite Membranes. I-II.  
 ORIG. PUB. : Listy cukrovarn., 1959, 75, No 3, 62-66;  
 66-69  
 ABSTRACT : I. Described are: principles of electrodialysis of the electrolytes with the use of ionite membranes, possibilities of employing this method for the purification of sugar juices, theoretical bases of purification of juices by this method and advantages in comparison with the common method employed in juice purification with ionites. In the electrodialysis of juices with ionite membranes the following are eliminated: the inversion of sucrose,  
 \*Processing.  
 CARD: 1/4

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83745  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : employment of chemical reagents for the ionite  
 Con'd regeneration, dilution of juices. Experimental investigations covered values of electric current used in the purification with ionite membranes of the saturated juice, green syrup and molasses of 15° Br. density as a function of the electrodialysis duration. The value of electrical charge, required for the transfer from the liquid space of the electrodialyzer into two neighboring spaces has been established for these products for the  
 CARD: 2/4

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 83745

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : purpose of ascertaining a complete removal of  
Con'd electrolytes from the juice. The determination  
of electrical charge value is essential for  
calculation of the electric power consumption  
required for purification of juices and of  
electrodialyzator's efficiency.  
II. Conducted were laboratory experiments on  
the electrodialysis with the use of ionite  
membranes employing mixtures of green syrup and  
saturated juice having densities of 30, 35, 40,  
45, 50, 60 and 70° Br. It was established from  
the standpoint of electric power consumption

CARD: 3/4

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 83745

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT :and of ionite membrane surface area require-  
Con'd ments, it is the most realistic way if green  
syrup in a mixture with saturated juice is  
subjected to electrodialysis. Presented is the  
determination method of the optimum concentra-  
tion of such a mixture. Purified mixture may  
be refined separately or it may be returned to  
the evaporators. Electrodialysis of the green  
syrup, aside of its purification effect, leads  
to the reduction of quantity of the obtained  
latter products at a refinery. -- Ye. Shnayder

CARD: 4/4

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Carbohydrates and Their\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83748  
AUTHOR : Vasatko, J.; Gartner, M.; Kleinertova, A.  
INST. : -  
TITLE : Production Method of Lactic Acid from Calcium  
Saccharite Obtained from Desugaring of the  
Feed Molasses  
ORIG. PUB. : Prumysl potraviny, 1959, 10, No 1, 47-52  
ABSTRACT : See Ref. Zhur.-Khimiya, 1958, No 4, 12767

\*Processing.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Carbohydrates and Their\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83749  
AUTHOR : Mlchova, J.; Svedova, J.  
INST. : -  
TITLE : Use of Polyamide Fabrics as Filter Cloth in  
the Sugar Manufacture  
ORIG. PUB. : Listy cukrovarn., 1959, 75, No 2, Inform. sluz  
sluzba, 1-3  
ABSTRACT : Polyamide fibers were employed at 83 sugar  
refineries in 1957-1958. At three refineries,  
a polyester fabric made of "terilene", an  
imported fabric from England, was tested as  
filter cloth. In comparison with polyamide fa-  
abric the latter one possessed greater resis-  
tance to temperature and to chemicals and  
swelled to a lesser extent. -- Ye. Shnayder.

\*Processing.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology, Chemical Products and  
Their Applications. Carbohydrates and Their\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83751  
AUTHOR : Sepitka, A.  
INST. : -  
TITLE : Nomogram for Simplified Determination of Molasses Quality Based on P. M. Silin's Method.  
ORIG. PUB. : Listy cukrovarn., 1959, 75- No 3, 59-61  
ABSTRACT : Based on the method developed by P.M.Silin pertaining to the determination of normal quality (Q) of molasses and based on formulas by him (see Ref. Zhur.-Khimiya, 1954, No 7, 22844; 1956, no 21, 70197) a nomogram was developed, that permits determining the following factors:  
a) quantity of water, necessary to add or remove from molasses in order to bring it up to a required exhaustion density level, b) Q of liquid after the exhaustion, c) Q of normal  
Processing.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83751  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : molasses. The nomogram is corrected for the  
Con'd exhaustion of molasses at a density, that is determined directly by a refractometer (82° Br.), as well as when molasses is diluted 1 : 1 (83.5° Br.). Accuracy of the nomogram is not inferior to that of the method.  
-- Ye. Shnayder.

CARD: 2/2

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Carbohydrates and Their\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83754

AUTHOR : -  
INST. : -  
TITLE : Sugar Production Method from Sugar Cane by  
Extraction

ORIG. PUB. : Shih p'in kung yeh, 1959, No 1, 15-18

ABSTRACT : Presented is the description and diagram of  
the original equipment employed at a local  
plant, as well as description of the sugar  
extraction process from sugar cane employed  
in the Tung-hsiang district (of the Chiang hsi  
province, CDR), notorious for its 500 year's  
sugar manufacturing experience. --A. Zonntag.

CARD: \*Processing.  
1/1

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Carbohydrates and Their \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83760

AUTHOR : -  
INST. : -  
TITLE : Experience in the Quality Improvement of  
Potato Starch

ORIG. PUB. : Shih p'in kung yeh, 1959, No 1, 27-29

ABSTRACT : Description of the process equipment employed  
at the Chinese starch refinery "K'e" in Hei  
ling chang province, with the aid of which  
quality of the produced starch is improved:  
color - white with crystalline luster, mois-  
ture - 19.8%, ash content - 0.27%, acid number  
-4, black spots - 2 per 1 cm<sup>2</sup>.-- A. Zonntag.

CARD: \*Processing.  
1/1

COUNTRY : CHINA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Carbohydrates and Their\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83764  
 AUTHOR : -  
 INST. : --  
 TITLE : Quality Improvement of Corn Starch  
 ORIG. PUB. : Shih p'in kung yeh, 1959, No 1, 29  
 ABSTRACT : Announcement regarding the measures undertaken  
 at the Chinese starch factory in the K'e ling  
 province resulting in the improvements of raw  
 starch purification.  
 \*Processing.  
 CARD: 1/1

COUNTRY : POLAND H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Carbohydrates and Their\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83768  
 AUTHOR : Gruzczynski, K.  
 INST. : -  
 TITLE : Production of Sodium Alginate from Seaweeds  
 Growing in Poland  
 ORIG. PUB. : Przegl. włokienn., 1958, 12, No 11, Biul.Inst.  
 włokienn., 10, No 8, 18  
 ABSTRACT : Described are methods of obtainment of two  
 sodium alginate (I) varieties, one of low vis-  
 cosity (30-100 cp.), another of high viscosity  
 (300-700 cp.), that find application in the  
 textile industry. The derivation of high vis-  
 cosity I encounters difficulties due to a too  
 rapid depolymerization rate of alginic acid  
 and due to its sensitivity to temperature  
 variations. Subsequent manufacturing steps of  
 I include: grinding of dried seaweeds, sifting  
 \*Processing.  
 CARD: 1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 83768

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and classifying , washing with dilute hydrochloric acid or with double-distilled water, double extraction of the ground and washed seaweeds with 5% NaCO<sub>3</sub> solution, purification of the I solution by centrifuging, bleaching with chlorine and separation of I with ethyl alcohol, drying and grinding of I product. Apparata employed in the manufacture of I should not be made of iron. It is made of acid-resistant metals, glass, wood.-- D.Bronshteyn

CARD: 2/2

COUNTRY :  
CATEGORY :

ABS. JOUR. : RZKhim., No. 1959, No.

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT :

CARD:



COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83778  
AUTHOR : Sandera, K.; Drachowska, M.  
INST. : -  
TITLE : Application of Membrane Conductometry in the  
Technology.

ORIG. PUB. : Przem. spozywczy, 1958, 12, No 10-12, 395-398

ABSTRACT : Investigations of conductivity were found  
Applicable to characteristics of membranes  
made of high molecular weight substances in  
the studies of newest packing materials for  
the control of changes occurring within and in  
the establishment of dependency on their che-  
mical composition, preparation methods, and  
storage conditions. Bioconductometrical mea-  
surments are applicable to the investigation of  
measurments themselves, occurring in inorganic  
solutions, aging of the gels and colloid

CARD: 1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No.23 1959, No. 83778

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : crystallization. They are also applicable in  
Con'd the control of processes involving fermenta-  
tion of sugars and changes, occurring in raw  
materials and foodstuffs.

CARD: 2/2

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83779  
AUTHOR : Yu Hsing-yuan  
INST. : -  
TITLE : Manufacture of Alcohol from "Dioscorea Nisoida"  
Dennst  
ORIG. PUB. : K'e hsueh ta chung, 1959, No 2, 81-82  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83780  
AUTHOR : Johanides, V.; Alacevic-Grlic, M.  
INST. : -  
TITLE : Derivation of Heterozygotic Species from  
Different *Aspergillus Niger* Calcites for the  
Purpose of Increasing Amylolytic Activity of\*  
ORIG. PUB. : Kemija u industriji, 1959, 8, No 4, 91-94  
ABSTRACT : Amylolytical ferments that are produced by  
the "*Aspergillus niger*" (A.n.) species when  
placed within a culture, from the standpoint  
of economics, possess advantages in the con-  
version of starches to sugars employed in the  
alcohol manufacture in comparison with rye or  
grain malt. Of the 25 investigated species  
(for their amylolytical activity), three  
samples of A.n. were selected as the most  
active ones. These species were cultivated in

\*Fungi.

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83780

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : pairs for the purpose of obtaining heterozy-  
Con'd gotic cultures. As the result of anastomosis  
of species A.n. No 337 NRRL and No 439 a new  
sample of species was obtained, which in a  
submerged culture, formed greater quantity of  
amylolytic ferments, than the parent compo-  
nents.

CARD: 2/2

COUNTRY : BULGARIA  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83783

AUTHOR : Rankov, G.; Popov, A.; Yovchev, A.  
INST. : Khim. Inst. Bulg. Acad of Science  
TITLE : A Method of Removing Methyl Alcohol from Vod-  
kas (Rakiya) on a Commercial Scale

ORIG. PUB. : Izv. Khim. in-t Bulg. Acad. of Science

ABSTRACT : A method was developed in accordance with  
which a still is charged with 2000-3000 l of  
vodka (rakiya) followed by heating with steam  
up to boiling point for a period of time  
(approx. 8 hours), during which the rectify-  
ing column, which operates with infinite  
reflux ratio, is enriched with 93-95% ethyl  
alcohol while all of methyl alcohol (I) is  
transferred into the column. I tends to con-  
centrate in the first half of distillate, the  
total quantity of which reaches 5% basis

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83783

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : total quantity of vodka charged into the still.  
Con'd The second half of distillate contains I in a  
quantity lower than that present in the raw  
vodka charge, and as the result of this, this  
latter distillate may be added to the next  
batch of vodka to be freed of I. The first half  
of distillate, enriched with I and comprizing  
2.5 Vol.% of batch charge, subjected to the  
elimination of I, may be utilized as technical  
denaturated alcohol, else by means of fraction-  
ation from this fraction may be derived methyl  
alcohol, higher alcohol (solvent) and ethyl  
alcohol(containing approx. 1% of I).

CARD:

2/2

COUNTRY : POLAND  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83785

H

AUTHOR : Ilczuk, Z.  
INST. : -  
TITLE : Infection of the Acetone-Butyl Musts with  
Extraneous Microorganisms

ORIG. PUB. : Acta microbiol. polon., 1958, 7, No 2, 149-158

ABSTRACT : Qualitative and quantitative investigation  
of the infection encountered in the acetone-  
butyl fermentation was conducted, revealing  
its effect on the yield of acetone (I). From  
17 samples of musts the following 18 bacteria  
species were identified: Lactobacillus, Strep-  
tococcus, Bacillus, Bacterium, Sarcina, Micro-  
coccus, Pseudobacterium, and 3 species of  
yeast. The separated species had different  
effect on the formation of I. Lactobacillus  
inhibited the process strongly, for instance

CARD:

1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 83785

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : L. mannitoroeus lowers the I yield by 87% as  
Con'd compared to the control sample. The effect of  
non-acid-forming bacteria on the yield of I  
was minimal. Yeasts added in a quantity of  
approx. 670,000 cells per 1 ml lowered the  
yield of I to some degree.

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83787

AUTHOR : Gregr, V.; Dyr, J.  
INST. : -  
TITLE : Improvements of the Technological Process of  
Lactic Acid Manufacture from Molasses

ORIG. PUB. : Sb. Vysoke skoly chem.-technol. Praze. Odd.  
Fak. potravin. Technol., 1957, [1], 177-195

ABSTRACT : Based on special studies on the improvement  
of mother culture preparation methods invol-  
ving lactic bacteria and on the establishment  
of optimum conditions of their nutrition, an  
accelerated method of conducting process on  
a commercial scale has been developed. It in-  
sures increase in the productivity of the fer-  
mentation department by 100% at the simulta-  
neous economy of malt sprouts, malt, autoly-  
sate, phosphates and sulfuric acid and impro-  
vement in quality of the lactic acid.

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83791  
AUTHOR : Mateescu, C.  
INST. : -  
TITLE : Inovations and Rationalizations at the "Rakhova  
Brewery, RDR  
ORIG. PUB. : Ind. aliment. Prod. veret., 1959, 11, No 2,  
62-63  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83793  
AUTHOR : Kahler, M.  
INST. : -  
TITLE : Hygienical Conditions in Bottling Departments  
and Their Effect on the Stability of Beer.  
ORIG. PUB. : Prumysl potraviny, 1959, 10, No 1, Pril.:  
Desinf. potraviny. prumyslu, 38  
ABSTRACT : Discussed are advantages and disadvantages  
of individual equipment items and processes  
from the standpoint of hygiene.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83795  
AUTHOR : Klazar, G.; Bednar, J.  
INST. : -  
TITLE : Bottling Beer Hot

ORIG. PUB. : Kvasny prumysl, 1959, 5, No 1, 3-6

ABSTRACT : Filtered beer is sterilized in a leaf heater and without cooling is bottled employing a special valve and thoroughly washed (the presence of a smallest speck of dirt causes foaming) and heated, up to 40°, bottle of high strength (at a temperature of beer-65°, the bottle must be checked to withstand 6.1 atm. pressure, at 80° - 7.6 atm). As beer enters the bottle it flows along the bottle's internal walls and fills it up to a mark without foaming. A small air space increases stability

CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83795  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of beer. When employing the above method of bottling the productivity is increased by 25 - 40%; organoleptical properties are not changed (neither due to hot bottling nor due to rapid or slow subsequent cooling). Extraneous odors, taste and easily precipitated sediment, characteristic to any pasteurized beer, are absent. The foam stability of beer is improved, while color is somewhat darker than normal. As applied to beers with appropriate coll. stability, this method insures technological advantages and is economically effective.-- R.Zalmanzon.

CARD:

2/2

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83797  
AUTHOR : Zanko, V.  
INST. : -  
TITLE : Developments in the Wine-Making  
ORIG. PUB. : Agrom.glasnik, 1959, 9, No 1, 15-22  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83809  
AUTHOR : Lichev, V.; Panayotov, I.  
INST. : Chem. Inst. of Bulg. Academy of Science  
TITLE : Aliphatic Aldehydes of Cognac Alcohol  
ORIG. PUB. : Izv. Khim. in-t. Bulg. Acad. of Science,  
1958, 6, 121-129  
ABSTRACT : Aliphatic aldehydes contained in cognac  
alcohols derived from "Dimyat" 1953 crop were  
separated by fractional distillation from  
aromatic aldehydes. In each of the 9 obtained  
fractions were found, with the aid of selective  
chromatography on paper and in the form of 2,  
4-dinitrophenylhydrazones the following  
HCOH, CH<sub>3</sub>COH, pronyon-, butyr-, valeraldehydes  
and others. Of the aromatic aldehydes were  
identified syringin aldehyde, vanillin, coniferyl and n-oxybenzaldehyde.

CARD: 1/1



COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83810  
AUTHOR : Lichev, V.; Panayotov, I.  
INST. : Chem. Inst. of Bulg. Academy of Science  
TITLE : Presence of Reducing Sugars in Cognac Alcohol  
and in Plum Brandy (Rakija)  
ORIG. PUB. : Izv. Khim. in-t. Bulg. Acad. of Science, 1958,  
6, 167-179  
ABSTRACT : In cognac alcohol, aged for 1-5 years and in  
Bulgarian plum brandy are found reducing su-  
gars, that are normally found in the initial  
stages of aging, whose composition depends on  
the type of barrel wood. The presence of rham-  
nose, xylose, arabinose and glucose was found  
in cognac alcohols and that of xylose and glu-  
cose in the plum brandies. In the alcohol ex-  
tract derived from acacia wood the presence of  
xylose only was established chromatographically  
CARD: 1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83825  
AUTHOR : Vasilev, D.  
INST. : -  
TITLE : Storage and Refining of Food Products  
ORIG. PUB. : Tekhnika (Bulg.), 1959, 8, No 2, 34-35  
ABSTRACT : No abstract.  
CARD: 1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83828  
AUTHOR : Donev, I.  
INST. : -  
TITLE : Application of Ultrasound in the Food Industry  
  
ORIG. PUB. : Khranit. prom-st, 1959, 8, 37-38  
ABSTRACT : A review.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83831  
AUTHOR : Timko, I.  
INST. : -  
TITLE : Progress and Modern Problems of the Food  
Products' Hygiene  
  
ORIG. PUB. : Elelm. ipar, 1959, 13, No 4, 111-113  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Product and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83832  
AUTHOR : Soukup, J.  
INST. : -  
TITLE : Inorganic Desinfectants  
  
ORIG. PUB. : Prumysl potraviny, 1959, 10, No 1, Pril. :  
Desinf. potraviny. prumyslu, 11-12  
ABSTRACT : A review of application methods of various  
inorganic substances used for disinfecting of  
the equipment, quarters, apparel and painted  
walls.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83833  
AUTHOR : Krampla, F.  
INST. : -  
TITLE : Organic Desinfectants for the Food Industry  
  
ORIG. PUB. : Prumysl potraviny, 1959, 10, No 1, pril.:  
Desinf. potraviny. prumyslu, 10-11  
ABSTRACT : The characteristic of organic desinfectants  
employed in the food industry

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83834  
AUTHOR : Szabo, Z.  
INST. : -  
TITLE : Employment of Filtration in the Food Industry  
  
ORIG. PUB. : Elem. írás, 1959, 13, No 5, 162-164  
ABSTRACT : Principles involved in the selection of fil-  
tration equipment and characteristics of batch  
type filters.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83836  
AUTHOR : Koczyk, I.  
INST. : -  
TITLE : Vitamins in Grain and in the Products Derived  
From It  
  
ORIG. PUB. : Przegl. zwoz. - mlynarski, 1959, 3, No 1, 23-  
-25  
ABSTRACT : Presented is a brief characteristic of A vita-  
mins of the groups B, K, E, folic and amino-  
benzoic acids, information pertaining to the  
total vitamin content of grain (as a function  
of its quality and the degree of ripeness),  
flour and in grain products. -- Z. Fabinskiy

CARD: 1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83840  
AUTHOR : Lambadzhiyev, A.  
INST. : Higher Institute of Food Industry, Plovdiv.  
TITLE : Suitability of Hard Bulgarian Wheat for the  
Composition Improvement of Grinding Grain  
Mixtures  
ORIG. PUB. : Nauchni tr. Vissh. in-t khrenit. i vkus. prom-  
-st- Plovdiv, 1958, 4, 73-95  
ABSTRACT : Based on the studies of baking qualities of  
various grades of hard and soft wheat as well  
as their mixtures, quality improvement of the  
weak wheat grain (for example, "Okerman",  
No 159 and others) was deemed feasible and  
attainable through the addition of hard wheat  
grain into the mixtures.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83842  
AUTHOR : Szmidt, W.  
INST. : -  
TITLE : Effect of Wheat Flour Made of Sprouted Grain  
on the Quality of Bread  
ORIG. PUB. : Przegl. zboz.-mlynarski, 1958, 2, No 12, 343-  
344  
ABSTRACT : In the employment of wheat flour, made of  
sprouted grain, and used in a mixture with  
rye flour, it is necessary to determine the  
dextrine number, on the basis of which an  
optimum quantitative ratio of wheat and rye  
flour in a mixture may be established.  
-- Z. Fabinskiy

CARD:

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83843  
AUTHOR : Bernhercs, A.  
INST. : -  
TITLE : Machinery and Flour-Grinding Equipment Abroad  
  
ORIG. PUB. : Pezegl. zboz.-mlynarski, 1958, 2, No, 12, 347-  
-348  
ABSTRACT : Presented is a brief characteristic of machi-  
nery employed for husking and polishing of  
grain and also of separators and portable pneu-  
matic loaders. -- Z. Fabinskiy

CARD: 1/1

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83845  
AUTHOR : Pantelic, G.  
INST. : -  
TITLE : Microorganisms in the Baking Industry and  
Biochemistry of Fermentation  
  
ORIG. PUB. : Proizv. i prerada brasna, 1959, 8, No 4, 71-78  
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83848  
AUTHOR : Szmidt, W.  
INST. : -  
TITLE : Particle Size of Flour and Its Effect on the  
Quality of Dough  
ORIG. PUB. : Przegl. zboz.-mlynarski, 1959, 3, No 1, 29  
ABSTRACT : Proved is the necessity of applying different  
methods of dough preparation depending on the  
particle size of flour.--Z. Fabinskiy

CARD: 1/1

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83850  
AUTHOR : Struyich, D.  
INST. : -  
TITLE : Air Conditioning in the Bread-Baking Industry.  
I, II.  
ORIG. PUB. : Tehnika, 1959, 14, No 4, Prehran. ind., 13,  
No 4, 48-52  
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83859  
AUTHOR : Petrescu, I  
INST. : -  
TITLE : Developments in the Production of Green Peas  
Preserves  
ORIG. PUB. : Ind. aliment. Prod. veget., 1959, 11, No 2, 57  
-58  
ABSTRACT : No abstract.

CARD: 1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83867  
AUTHOR : Radoyv, A.; Mladenov, A.  
INST. : -  
TITLE : Dietetic Pumpkin Flour. Part I.  
ORIG. PUB. : Nauchni tr. Vissh. in-t khranit. i vkus.  
prom-st-Plovdiv, 1958, 4, 203-206  
ABSTRACT : Based on the presented data pertaining to  
chemical composition of pumpkin flour (containing  
carotin, mineral salts, vitamin C, pectin  
substances), derived from a large variety pumpkin  
(cucurbita maxima), experiments of feeding  
infants, have been started. This also included  
feeding of children and adults having liver and  
kidney ailments. The method of preparation:  
after washing a pumpkin is peeled and cleaned of  
the pulpy part diced and dried followed by grinding  
in a hammer mill.

CARD: 1/1



COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83871  
AUTHOR : Stambolic, M.  
INST. : -  
TITLE : Production of milk in Yugoslavia  
  
ORIG. PUB. : Mljekarstvo, 1959, 9, No 6, 121-124  
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83872  
AUTHOR : Dahlstedt, A.  
INST. : -  
TITLE : General Review of Recent Development in  
Equipment Employed by the Milk Industry.  
  
ORIG. PUB. : Mljekarstvo, 1959, 9, No 5, 101-106  
ABSTRACT : No abstract

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Food Industry  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83894  
 AUTHOR : Sulc, J.  
 INST. : -  
 TITLE : Trends in the Production of Yogurt and of  
 Buttermilk Beverages  
 ORIG. PUB. : Promysl potravin, 1958, 9, No 5, 245-250  
 ABSTRACT : Of the new production methods of buttermilk  
 beverages. Scandinavian method is considered  
 as most economical one. Pasteurized milk is  
 curdled and then cooled in tanks, homogenized  
 and bottled. The recommended scheme for the  
 production of yogurt is: pasteurized milk en-  
 ters the vacuum apparatus without cooling for  
 the removal of a portion of its water, then it  
 enters a tank where it is cooled and curdled.  
 A mixture of milk and curds is then bottled  
 in stoppered bottles. The latter, after being  
 CARD: 1/2

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 83894  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : heated, is then dosaged (approx. 30 gr), intro-  
 Con'd ducing the bottom of bottles, (after the latter  
 were washed). Then the bottles enter a convey-  
 er, where they are cooled with the stream of  
 air. Bottles, containing curdled milk, are  
 placed in baskets and kept under controlled  
 temperature conditions for the final curdling.  
 After this the flow of warm air is disconti-  
 nued and yogurt is cooled by spraying bottles  
 with cold water. Completion of the curdling  
 process is determined with the aid of a remote  
 potentiometer. -- G. Titov  
 CARD: 2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83907  
AUTHOR : Hattowska, H.; Kalinowski, L.  
INST. : -  
TITLE : Evaluation of Butter Production from the  
Standpoint of Microbiological Investigations,  
Conducted at the Institute of Milk Industry  
ORIG. PUB. : Przegl. mleczarski, 1957, 5, No 12, 20-22  
ABSTRACT : Bacteriological quality of Polish butter is  
considered lower than of that produced in the  
USSR, GDR or England. The overall bacterial  
content of highest quality Polish butter rea-  
ches 22 mln/ml, wherein approx. 60% of micro-  
flora consist of non-milk curdling varieties  
and in the 54% of samples the presence of in-  
testinal bacteria was revealed. The reason for  
low quality butter is the low quality raw ma-  
terials, the composition of curdling and main-  
ly unsatisfactory sanitary-hygienic conditions  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83907  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : in the handling and refining of milk. To this  
Con'd can be added the insufficiently effective wa-  
shing of the plant equipment and of milk lines.  
-- V. Novikova

CARD: 2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83908  
AUTHOR : Cesul, J.  
INST. : -  
TITLE : Quality of Butter in the Light of Scientific  
Investigations of Recent Years  
ORIG. PUB. : Przegl. mleczarski, 1957, 5, No 12, 18-20  
ABSTRACT : Presented are data on the investigation of  
macro-and microstructure of butter: conditions  
and distribution of fat and water, of flora,  
affecting the consistency of butter and its  
stability. Reviewed is the feasibility of  
butter treatment in an atmosphere of CO<sub>2</sub> or  
under pressure. -- V. Novikova.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83910  
AUTHOR : Havlicek, Z.  
INST. : -  
TITLE : Transportation of Milk in Tank and Manufacture  
of Cheese  
ORIG. PUB. : Prumysl potraviny, 195 , 9, No 5, 244-245  
ABSTRACT : From milk, delivered in tanks, 67% of elemen-  
tary first grade cheese were produced in May,  
69% in June, 67% in July, 70% in August and  
72% in September. The balancing portion of  
cheese was graded as second class, and no  
third grade cheese was produced at all. Based  
on the conducted experiments a possibility of  
manufacture elementary cheese from milk, de-  
livered in tanks was established under con-  
dition of rapid delivery of high quality milk.  
-- G. Titov.

CARD: 1/1

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83921

AUTHOR : Vujicic, I.  
INST. : -  
TITLE : Cheese Mite in Cheese and Casein

ORIG. PUB. : Mljekarstvo, 1958, 8, No 2, 36-38

ABSTRACT : To combat cheese mites, in addition to the mechanical cleaning of cheese, it is washed with concentrated NaCl solution, with a mixture of alcohol and CS<sub>2</sub> (20 : 1) or with a 0.07% solution of dichloroethyl or dichloromethyl ether. Cheese mite may be destroyed by the immersion of cheese into water for several seconds at 65° temperature. For the prevention of infection of cheese with mite it is recommended that cheese be stored at a temperature < 10° and at a relative humidity of < 80%.  
-- Z. Lebedevs.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83924

AUTHOR : Cerovsky, J.; Henik, J.; Hojdar, J.; Knez, V.  
INST. : -  
TITLE : Mechanized Flow Line for the Production of Acid Casein

ORIG. PUB. : Prumysl potravin, 1958, 9, No 6, 285-288

ABSTRACT : For complete mechanization of a continuous flow in the manufacture of casein it is proposed to include a counterflow, direct action washer and a transporter press. The washer comprises a slanted, stationary cylinder, equipped with an internal, perforated, rotating drum, having a mixer. Paddles of the mixer are arranged in a screw type fashion along the whole length of the shaft. They are so oriented as to direct the flow of grains upward, countercurrently to the flow of water.

CARD: 1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 83924

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Experiments have shown that the use of a washer  
Con'd doubles capacity of the fermentation vats, in-  
creases the manpower productivity by 20%, de-  
creases the manufacturing price of casein by  
41.5%. The consumption of water employed in  
washing casein particles, derived from 5000 l.  
of milk, comorizes 7200 l. instead of 12,400 l.  
used in 4 applications of batch washing if done  
in accordance with the usual method. -- G. Titov

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83930

AUTHOR : Rusz, J.  
INST. : -  
TITLE : Effect of Feed Used During the Fattening  
Period on the Chemical Composition of Goose  
Fat  
ORIG. PUB. : Prumysl potraviny, 1958, 9, No 11, 574-578

ABSTRACT : It has been established that the fat of geese,  
fed with corn, contains less saturated acids  
(6-7% linoleic acid), than when fed with oats  
(up to 15%). Thus, geese, fattened up with  
oats, are less stable under frozen storage  
condition. The bibliography covers 21 titles.  
-- D. Yakesh.

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 28 1959, No. 83939  
AUTHOR : Heitel, F.  
INST. : -  
TITLE : Is it Possible To Reduce Analysis Time for the  
Determination of Fats in Meat Products?  
ORIG. PUB. : Rev. ind aliment. prod. animale, 1957, No 8-9,  
27-28  
ABSTRACT : Reduction of the number of syphoning operations  
by 2, 3 and 4 times with the use of correction  
coefficients of respectively 0.60, 0.40 and  
0.20%, as well as extraction with only one sy-  
phoning, but with electrical heating (24 Volts)  
for 5 minutes of the middle portion of the  
Soxhlet apparatus, permitted the reduction of  
time for the determination of fat in meat pro-  
ducts by 50%. The results obtained in the ex-  
traction with benzene and ether, were close.  
-- A. Marin  
CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their applications. Food Industry  
ABS. JOUR. : RZKhim., No. 28 1959, No.83941  
AUTHOR : Lorincz, F.; Kneffel, P.  
INST. : -  
TITLE : Stability of the "Salmonella" Type Bacteria  
With Respect to Heating and to Sodium Chloride  
ORIG. PUB. : Elelm. ipar, 1957, 11, No 11-12, 225-231  
ABSTRACT : Presented are results of the experiments on  
the study of the effect of cooking methods,  
boiling and salting, employed in the Hungarian  
meat industry on the activity of salmonella  
type bacteria. It is established that in the  
boiled sausage products, with the improved  
techniques in boiling, followed by frying, the  
salmonellas are practically absent. Salting  
and marinading of products infected with sal-  
monella, guarantees their non-toxicity under  
the conditions of prolonged curing. It is  
CARD: 1/2

COUNTRY :  
CATEGORY : H

ABS. JOUR. : RZKhim., No. 23 1959, No. 83941

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : established that the stability of salmonella  
Con'd to heating and to sodium chloride is vastly  
different. -- S. Rosenfel'd.

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry

ABS. JOUR. : RZKhim., No. 23 1959, No.83942

AUTHOR : Janicek, J.; Boublik, M.; Kovarik, M.  
INST. : -  
TITLE : Drying of Meat by Sublimation (Lyophilization)

ORIG. PUB. : Prumysl potravin, 1959, 10, No 2, 72-76

ABSTRACT : Studied were the basic conditions of meat  
drying by sublimation. Water content in the  
dehydrated beef is 5.5-8.3%, in pork 4.6-8.1%;  
pH respectively 5.1-5.6 and 5.2-5.8. Freshness  
of the dehydrated beef was determined by the  
NH<sub>3</sub> content; after the restoration of moisture  
NH<sub>3</sub> content in beef comprized 15.7 mg%, in  
pork 16.9 mg%. Storage of the dehydrated meat  
at temperatures of -20, 4, 20 and 37° for 70  
days did not affect the NH<sub>3</sub> build up in meats  
(16.5 mg% at -20°, and 18.20 mg% at 37°).  
-- D. Yakesh.

CARD: 1/1



COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 28 1959, No. 83947

AUTHOR : Koenne, S.; Sroczynski, T.  
INST. : -  
TITLE : Chloride Content in the Muscles of Ham With  
the Arterial Injection of Brine

ORIG. PUB. : Przem. spozywczy, 1957, 11, No 11, 473-478

ABSTRACT : In the salting of hams, employing injection  
of an 8% brine into the arteries, the NaCl  
content in individual muscles comprizes  
0.5 - 4.5%. In the shortly trimmed hams, the  
average NaCl content is lower. As a result of  
this it is recommended that 0.5 - 1.0% more  
brine be injected in the latter type hams.  
For the obtainment of uniform salted products,  
hams must be kept in the curing brine for some  
time.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 28 1959, No. 83954

AUTHOR : Lat, J.  
INST. : -  
TITLE : Certain Problems of the Manufacturing Techno-  
logy of Hard Smoked Sausages

ORIG. PUB. : Prumysl potraviny, 1959, 10, No 2, 69-72

ABSTRACT : Review of the basic manufacturing aspects of  
high quality hard smoked sausages. --D. Yakesh

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83955  
AUTHOR : Stefunka, F.  
INST. : -  
TITLE : Casings for Smoked Cheese Sausages and for  
Certain Other Varieties of Smoked Meat.  
ORIG. PUB. : Prumysl potravin, 1958, 9, No 11, 566-569  
ABSTRACT : Presented are the results of experiments in  
the production of casings for hard smoked sau-  
sages. Presented are recipes for various  
casings/coverings. The following composition  
is recommended: 1% chlorine water, 80g gela-  
tine, 250g chalk, 20g tragacanth, 25g glycerine  
and 50g talcum.-- D. Yakesh.

CARD: 1/1

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83960  
AUTHOR : Trumic, Z.  
INST. : -  
TITLE : Practical Sterility of Meat Preserves  
ORIG. PUB. : Tehnika, 1958, 13, No 3, Prehran. ind., 12,  
No 3, 39-42  
ABSTRACT : Reviewed are factors, that determine practical  
sterility of preserves and that prevent rea-  
ching their absolute sterility; Discussed are  
problems of heat penetration into the preser-  
ves' contents. Heat stability of certain indi-  
vidual microorganisms types is established.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83963  
AUTHOR : Musil, F.; Orel, V.  
INST. : -  
TITLE : Suitability of Early Spring Eggs for Preser-  
ving  
ORIG. PUB. : Prumysl potraviny, 1958, 9, No 1, 44-49  
ABSTRACT : It has been established that eggs, layed in  
the period of spring frosts, may be preserved  
if the egg-shell is free of cracks. Eggs ha-  
ving red egg-white, after sorting out, may be  
used in the manufacture of melanges; with a  
thorough homogenizing its quality will conform  
to that made of normal eggs.

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Food Industry  
ABS. JOUR. : RZKhim., No. 23 1959, No. 83967  
AUTHOR : Ienistea, C.; Ieremia, T.  
INST. : -  
TITLE : Microbiological Studies of Fresh Water Fish in  
the Storage at 16-19°  
ORIG. PUB. : Igiena, 1959, 8, No 2, 145-150  
ABSTRACT : Review of the microbiological analyses results

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Synthetic Polymers.\*  
ABS. JOUR. : RZKhim., No. 28 1959, No. 84015  
AUTHOR : Stenniak, L.  
INST. : -  
TITLE : Automobile Parts Made of Plastics  
ORIG. PUB. : Techn. motoryz., 1958, 8, No 10-11, Biul.  
inform. ITS, 7, No 5, 4  
ABSTRACT : Described is the application of plastics in  
place of metals and other materials in the  
manufacture of automobile parts: bearings,  
stoppers, handles, coverings, parts of brake  
cylinder and steering shaft, seats, etc. It  
has been established, for instance, that spring  
stoppers made of glass-textolite stand well  
after 15-25 thousand kilometers while bronze  
stoppers could not last more than 12 thousand  
kilometers. -- L. Sedov  
CARD: \*Plastics.  
1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Synthetic Polymers.\*  
ABS. JOUR. : RZKhim., No. 28 1959, No. 84021  
AUTHOR : Slawinski, Z.  
INST. : -  
TITLE : Phenoloc Raw Materials for the Manufacture of  
Phenol Type Plastics in Poland  
ORIG. PUB. : Przem. chem., 1958, 37, No 10, 621-627  
ABSTRACT : Reviewed is further expansion of raw materials  
for the synthesis of phenol type plastics  
employing m-cresol, tricresol and xylenols.  
-- L. Sedov.  
CARD: \*Plastics.  
1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications.  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84023  
AUTHOR : Janis, F.; Kadlec, A.  
INST. : -  
TITLE : Determination of Thermal Expansion of Plastics  
  
ORIG. PUB. : Chem. průmysl, 1958, 8, No 10, 552-554  
ABSTRACT : Specific volumes and coefficients of thermal  
expansion of the melts were determined (while  
cooling gradually) of polycaprolactam, of a  
copolymer of caprolactam and of  $\epsilon$ -methylcapro-  
lactam (90 : 10) of polyethylene and of poly-  
styrol in the temperature range of 20 - 250°.   
Thus obtained specific volume values were com-  
pared with the results obtained from the pich-  
nometric measurements. It was established that  
at temperatures of 20 to 30° the difference in  
density measurements by the two methods compriz-  
ed no more than 0.1%. -- L. Sedov.  
  
CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Synthetic Polymers.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84039  
AUTHOR : Dolezel, B.  
INST. : -  
TITLE : Effect of Sulfuric, Nitric and Hydrochloric  
Acids on the Non-Plasticized Polyvinylchloride  
  
ORIG. PUB. : Chem. průmysl, 1958, 8, No 10, 554-558  
ABSTRACT : Samples of polyvinylchloride (I) (with 2% of  
lead stearate), measuring 30×80×3mm, were  
placed in a vessel, containing 75 ml of acid,  
and after a definite time interval were wei-  
ghed, thus determining differences in weight  
of the samples. It was found, that "m" - quan-  
tity of a substance, absorbed by the samples  
during "t" time, and "m", -quantity of a sub-  
stance, consumed in "t" time are related to  
each other in the following way:  $lgm = K(lgt -$   
 $- lgt_1) + lgm_1$ , where K is a constant.  
\*Plastics.  
  
CARD: 1/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84039

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : It has been also found that the change of sam-  
Con'd ples' weight, immersed into sulfuric acid, de-  
creases with increased concentration of the  
acid. With a 50% or higher acid concentrations  
the destruction of polymer begins, that proceeds  
at a noticeable rate only at temperatures  $> 100^\circ$ .  
A dilute sulfuric acid does not affect mecha-  
nical properties of I; concentrated acid - in-  
creases tensile strength and hardens, while  
elongation of the material decreases. In the  
action of nitric acid, quantity of the absor-  
bed substances increases with time and

CARD: 2/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84039

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : temperature and decreases with increased con-  
Con'd centration of the acid. A concentrated acid  
causes lowering of the molecular weight of I  
and breaking off of hydrogen chloride. After  
90 days immersion in a 40% nitric acid at 20  
and  $40^\circ$ , hardening of the samples was noted  
respectively by 10 and 20% and decrease of  
the samples' elongation upon stretching. Its  
tensile strength was practically unaffected.  
Hydrochloric acid has no noticeable effect on  
the mechanical properties of I, even at high  
concentrations. -- L. Sedov.

CARD: 3/3

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Synthetic Polymers.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84043  
AUTHOR : Hertz, Z.  
INST. : -  
TITLE : Preparation of Hard Polyvinylchloride for the  
Manufacture of Chemical Apparata  
ORIG. PUB. : Przem. chem., 1958, 37, No 9, 609-611  
ABSTRACT : A brief review of conference data pertaining  
to the manufacture of apparatus from polyvinyl-  
chloride used for storage and transport of  
chemical products (collectors, process lines,  
linings for metal or concrete collectors, com-  
prizing tiles made of "viny-plast" and others).  
-- L. Sedov.

\*Plastics.  
CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Synthetic Polymers. \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84044  
AUTHOR : Usarewicz, B.  
INST. : -  
TITLE : Application of Polyvinylchloride in the  
Furniture Industry  
ORIG. PUB. : Przem. drzewny, 1959, No 1, 12-13  
ABSTRACT : Investigated was the possibility of employing  
polyvinylchlorides the advantages of which  
are: low density, sufficient mechanical stren-  
gth, fireproof resistance, and mechanical  
workability with regard to the ease of instal-  
lation as table tops, in the manufacture of  
chairs (made of tubing and sheets), chair and  
sofa stuffing, and upholstery ("penoplast" and  
artificial chamois made of polyvinylchloride  
base) and as covering for kitchen furniture.  
-- L. Sedov.

\*Plastics.  
CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Synthetic Polymers.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84045  
AUTHOR : Laskawski, W.  
INST. : -  
TITLE : Study of Polyvinylchloride Plastics. I. General  
Properties of Polyvinylchloride Plastics.  
ORIG. PUB. : Przem. chem., 1958, 37, No 9, 606-607  
ABSTRACT : Description of the composition, properties and  
refining of polyvinylchloride plastics by the  
methods of immersion, filling of hollow forms,  
impregnation of fabrics, pressing, dusting and  
foaming.-- L. Sedov.

CARD: \*Plastics.  
1/1

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Synthetic Polymers.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84071  
AUTHOR : Strubell, W.  
INST. : -  
TITLE : Organic Peroxides, Employed in the Plastics  
Industry, and Their Grinding to Size  
ORIG. PUB. : Plaste und Kautschuk, 1958, 5, No 4, 134-135  
ABSTRACT : A review. The basic reason for explosions,  
occurring during the grinding of organic perox-  
ides (OP) is the formation of peracids under  
the influence of moisture, and also the auto-  
decomposition of OP with the liberation of  
atomic oxygen, that causes an excessive gener-  
ation of heat from the finely divided OP par-  
ticles in the grinding and storage. Reviewed  
are various methods of OP grinding: grinding  
in a mixture with inert fillers; derivation

CARD: \*Plastics.  
1/2



COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 84071

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : of finely dispersed OP from alkaline water  
Con'd solutions in the presence of  $\text{Ca(OH)}_2$  or of  
quartz powder; grinding in the form of suspen-  
sions in certain organic or inorganic solvents,  
drying of wet ground OP in mixtures with  $\text{MgO}$ .  
the bibliography covers 8 references.  
-- V. Gel'nerina

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Synthetic Polymers\*

ABS. JOUR. : RZKhim., No. 23 1959, No. 84102

AUTHOR : Leseck, F.; Kudelka, F.  
INST. : -

TITLE : Derivation of Ion Exchange Resins by "Granular  
Condensation

ORIG. PUB. : Chem prumysl, 1958, 8, No 10, 545-551

ABSTRACT : The investigation covered certain interdependen-  
cies of the effects of apparatus and phys-  
sical conditions of "granular" poly-condensa-  
tion on the size of granules formed. A mathe-  
matical dependency between the diameter of  
granules and the Reynolds and Weber numbers  
was established. -- L. Sedov.

Plastics.  
CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Product and  
Their Applications. Caoutchouc, Natural and\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84188  
AUTHOR : Blum, A.  
INST. : -  
TITLE : Technical News in the Rubber Industry  
  
ORIG. PUB. : Ind. uscars, 1959, 6, No 1, 18-22  
ABSTRACT : A review.

\*Synthetic Rubber.  
CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Caoutchouc. Natural and \*  
ABS. JOUR. : RZKham., No. 23 1959, No. 84193  
AUTHOR : Ghircoiasu, C.  
INST. : -  
TITLE : Problems of the Latex Technology. I, II.  
  
ORIG. PUB. : Ind. uscara, 1958, 5, No 10, 384-386; No 12,  
465-468  
ABSTRACT : A review. The bibliography includes 27 titles.  
--- I. Shmurak.

\*Synthetic Rubber.  
CARD: 1/1

COUNTRY : GDR H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Caoutchouc. Natural and \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84201  
AUTHOR : Hofmann, G.  
INST. : -  
TITLE : Synthetic "Natural" Caoutchouc  
  
ORIG. PUB. : Plaste und Kautschuk, 1959, 6, No 3, 131-135  
ABSTRACT : A review. The bibliography includes 26 titles.  
-- M. Bukhina.

CARD: \*Synthetic Rubber.  
1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Caoutchouc. Natural and\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84211  
AUTHOR : Jebac, C.; Bunghinz, S.  
INST. : -  
TITLE : Application of Butadiene-Styrol Polymers,  
Plasticized with Oil (Buna OP) in the Rumanian  
Rubber Industry.  
ORIG. PUB. : Ind. usocara, 1958, 5, No 7, 270-272  
ABSTRACT : The plasticizing of Buna S-3 and SKS-30 rubber  
is affected with the use of petroleum residue  
(commercial E-5 grade), having the following  
properties: specific gravity (15°), 0.995-  
-1.015, flash point 245-270°, pour point of  
-40 to + 45°, viscosity (Engler) at 50° 10-15°  
ash ≥ 0.2%, water content, nil. Plasticizing  
is acheaved in a mixer, the quantity of E-5  
is 40% basis rubber. Conditions employed:

CARD: \*Synthetic Rubber.  
1/2

COUNTRY :  
CATEGORY : H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84211

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Buna S-3 is introduced into the mixer while mixing for 4 minutes; this is followed by the E-5 addition during the next 11 minutes at 70-80°; after 15 minutes the product is stretched out into sheets, rolling the latter into cylindrical rolls, prior to mixing they are stored  $\leq$  24 hours. The product, called Buna E-40, lowers the consumption of synthetic rubber by 15-20%, it improves technological properties of the mixtures by 10-15%, cheapens their production cost by 7-10% and eliminates thermal depolymerization.-- G. Markus.

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Caoutchouc. Natural and\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84214

AUTHOR : Beniska, J.  
INST. : -  
TITLE : Effect of Activators on the Vulcanization Process (III). Action of Zinc Oxide on the Vulcanization of Mixtures Containing Diphe-\*\*

ORIG. PUB. : Chem. zvesti, 1958 12, No 10, 599-605

ABSTRACT : Effect of ZnO on the rate of S addition (R) and on the formation of cross-bondages (F) of the mixtures of SKB-35 and NK containing diphenylguanidine (I) was investigated. ZnO has no practical effect on R when present in the mixtures of SKB-35 and NK as well as on F in the mixtures, containing SKB-35. Mixtures containing NK, ZnO affects F. The number of

\*Synthetic Rubber.

\*\*nylguanidine.

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84214

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : cross-bonds in the mixtures with I are greater  
Con'd than in similar mixtures containing mercapto-  
benzothiazol. ZnS is formed in the vulcaniza-  
tion, its quality depends on the type of pro-  
moter used in a rubber. The greatest quantity  
of ZnS forms in the mixtures containing NK and  
in the presence of I. For Part II see Ref. Zhur  
Khimiya, 1959, No 13, 48014.

CARD: 2/2

COUNTRY :  
CATEGORY :

GDR

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84235  
: Chemical Technology. Chemical Products and  
Their Applications. Caoutchouc. Natural and\*

AUTHOR : Krizek, V. Rybnikar, F.

INST. : -

TITLE : Microscopic Determination of Rubber Products'  
Fading.

ORIG. PUB. : Plaste und Kautschuk, 1959, 6, No 3, 113-117

ABSTRACT : Described is the method of identification of  
the fading ingredient (antioxidants, promoters  
/accelerators, S. paraffine). The faded sub-  
stance is washed away from the surface of rub-  
ber with benzene, precipitated with a solution  
containing NK. followed by a microscopic exa-  
mination in polarized light. The ingredient  
is identified through the observation of its  
crystalline structure. Presented are micro-  
photographs for all the ingredients studied.

-- M. Bukhina.

\*Synthetic Rubber.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Artificial and Synthetic\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84272

AUTHOR : Horovitz, M.  
INST. : -  
TITLE : New Trends in the Manufacture of Synthetic  
Fibers.

ORIG. PUB. : Technika (Magyar), 1959, 3, No 3, 5.

ABSTRACT : A brief description of chemical and physico-  
-mechanical methods employed in the manufac-  
ture of synthetic fibers for the elimination  
of shortcomings in their quality (low absorp-  
tive capacity to water, poor thermo-insulating  
properties, overall appearance) - the use of  
co-polymers, obtainment of fibers with diffe-  
rent cross-sectional shape, etc. --S.Rosenfeld

CARD: \*Fibers.  
1/1

COUNTRY : BULGARIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Artificial and Synthetic\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84276

AUTHOR : Fanin, M.  
INST. : -  
TITLE : Nylon Synthetic Fibre

ORIG. PUB. : Biol. i khimiya (Bulg.), 1959, No 1, 30-33

ABSTRACT : Production, properties and applications of  
the polyamide fibers (an article for chemistry  
school teachers)

CARD: \*Fibers.  
1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Artificial and Synthetic\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84284  
AUTHOR : Kalafut, S.; Slivovsky, L.  
INST. : -  
TITLE : Effects of Zinc Sulfate and of Triethanolamine  
on Shaping of the Viscose Fibers.  
ORIG. PUB. : Chem. promysl, 1959, 9, No 2, 104-108  
ABSTRACT : Effects of zinc sulfate (I) and of triethanol-  
amine (II) on the quality of viscose fibers  
was investigated. It was established that II  
increases the diffusion of  $H_2SO_4$  (III) into the  
interior of fibers. Homogeneous fibers (cross-  
-sectionally) are being formed in a weaving  
bath containing (in gr/l) 52-120 of I, 10 of  
II and 100-120 of III. Strongest fibers are  
obtained with the weaving bath filled with  
90 g/l of III (while the rate of weaving is  
\*Fibers.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84284  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : 30 m/min). II tends to retard the decomposi-  
Con'd tion of fiber, contained in a weaving bath.  
The method of controlling the weaving process  
has been developed. It is based on the color  
penetration as judged from the examination of  
the cross-sectional fiber.  
CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Artificial and Synthetic\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84285  
AUTHOR : Píklér, A.; Svitek, J.  
INST. : -  
TITLE : Study of Hemicelluloses Derived from Pressed  
Liquors Obtained from Viscose Manufacture  
ORIG. PUB. : Chem. průmysl. 1958, 8, No 12, 661-665  
ABSTRACT : No abstract.

CARD: \*Fibers.  
1/1

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Artificial and Synthetic\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84286  
AUTHOR : Pozlep, A.  
INST. : -  
TITLE : Finishing of Viscose Fibers.  
ORIG. PUB. : Tekstil, 1958, 7, No 12, 1049-1054  
ABSTRACT : No abstract.

CARD: \*Fibers.  
1/1



COUNTRY : CZECHOSLOVAKIA H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Artificial and Synthetic\*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 84293  
 AUTHOR : Hurt, V.; Jambrich, M.  
 INST. : -  
 TITLE : Investigation of Certain Textural and Struc-  
 tural Variations of the "Sylon" Fibers. II  
 ORIG. PUB. : Chem. zvesti, 1958, 12, No 8, 496-508  
 ABSTRACT : Through the determination of the degree of  
 darkening resulting from the radial and circ-  
 ular application methods (to the fabrics half-  
 -widths), variations in the fiber orientation  
 in the "sylon" fibers (tackle string) was in-  
 vestigated in the process of a continuous  
 stretching. It was established that in a cer-  
 tain range of stretching a temporary orienta-  
 tion occurs which points to a possibility of  
 the existance of a certain miniature macroscop-  
 ical effect in a case when the continuous  
 \*Fibers.  
 CARD: 1/2

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 84293  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : stretching takes place above the temperature  
 Con'd of the second order transition. Changes of the  
 darkening intensity of the diatronic reflexes  
 (002) were studied, starting with a degree of  
 stretching of 1 : 2.6 and up to a point when  
 fibers busted. The minimum on the curve (the  
 darkening intensity of diatronic reflexes vs  
 the degree of stretch) corresponds to optimum  
 mechanical properties of the tested samples.  
 Possible mechanism of a continuous stretching  
 process above the transition temperature of  
 second order is considered. For Part I see Ref  
 Zhur.-Khimiya, 1959, 10, 37426.--A.Rogovina.  
 CARD: 2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications, Artificial and Synthetic\*  
ABS. JOUR. : RZKhimi, No. 23 1959, No. 84298  
AUTHOR : Rozycki, A.  
INST. : -  
TITLE : "Polan". Problems and Perspectives of Applica-  
tion.  
ORIG. PUB. : Techn. włokienn., 1959, 8, No 2, 58-60  
ABSTRACT : Properties and fields of application of the  
polycaproamide fiber - "polan". --I. Fodiman.

CARD: \*Fibers.  
1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Artificial and Synthetic\*  
ABS. JOUR. : RZKhimi., No. 23 1959, No. 84300  
AUTHOR : Stajniak, K.  
INST. : -  
TITLE : Terilen in the Knitting Industry  
ORIG. PUB. : Techn. włokienn., 1958, 7, No 11-12, 380-382  
ABSTRACT : No abstract.

CARD: \*Fibers.  
1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its Deriva-\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84311  
AUTHOR : Korodi, J.  
INST. : -  
TITLE : Problems of the Cellulose-Paper Industry in  
Hungary  
ORIG. PUB. : Foldr. kozl., 1959, 7, No 1, 45-61  
ABSTRACT : Presented are detailed information pertaining  
to the development of the cellulose-paper  
production in the HDR for 1925-1940 and for  
1946-1957 periods, geographical location of  
the plants, raw materials used and to raw mate-  
rials imported. Presented also are technologi-  
cal data and economics covering the perspec-  
tives of further development of this industry.  
CARD: \*tives. Paper.  
1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84320  
AUTHOR : Kozmal, F.; Bucko, J.  
INST. : -  
TITLE : Acacia - A New Raw Material for the Cellulose-  
-Paper Industry.  
ORIG. PUB. : Nasa veda, 1959, 6, No 1, 3-5  
ABSTRACT : Described are experiments in the obtainment  
of cellulose (C) from acacia by employing  
sulfite and sulfate methods. In accordance  
with the first method, the yield of C is 40.9%  
and with the second is 38.9%. Raw cellulose  
has a darker color, than that derived from  
coniferous wood pulp, however, it can be blea-  
ched to higher degree of whiteness than the  
coniferous C. The  $\alpha$  - cellulose content is  
89.0%, the absolute viscosity is 16.9 cm.  
Its strength, after prinding is 4695m.  
CARD: \*Derivatives. Paper.  
1/2

COUNTRY :  
CATEGORY : H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84320

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : This wood pulp is recommended for special  
Con'd grades of paper. --D. Yakesh.

CARD: 2/2

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84325

AUTHOR : Siminescu, C.; Calistru, E.  
INST. : -  
TITLE : Viscose Cellulose Derived from Reed

ORIG. PUB. : Celul. si hirtie, 1959, 8, No 4, 111-117

ABSTRACT : Based on the investigation of morphological  
structure and on uniqueness in the degree of  
polymerization of macromolecules of the reed  
viscose cellulose (VC), the conclusion was  
made that the reed VC quality is not inferior  
to VC derived from wood pulp. The morpholo-  
gical structure was investigated by the K.  
Heide method, employing 80%  $H_3PO_4$  for the  
wood VC and 83%  $H_3PO_4$  for the reed VC, as well  
as with 60%  $H_3PO_3$ . The degree of polymeriza-

\*Derivatives. Paper.

CARD: 1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 84325

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : zation was determined from solubilities in  
Con'd  $H_3PO_4$  and by a special fractionation method  
of the solutions, employing the precipitation  
with  $H_2SO_4$  at low temperatures, that insures  
a possibility of finding criteria for the clas-  
sification of celluloses depending on the fra-  
ctions entering solution and on the initial  
acidity of the medium.

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*

ABS. JOUR. : RZKhim., No. 23 1959, No. 84329

AUTHOR : Richter, J.  
INST. : -  
TITLE : Continuous Digestion of Sulfate Cellulose

ORIG. PUB. : Papir a celul., 1959, 14, No 2, 27-30

ABSTRACT : Described is a method of continuous digestion  
presented are equipment diagrams and basic  
conditions of digestion. The obtained cellu-  
lose was of much higher quality compared to  
that derived through the use of previous  
methods. -- D. Yakesh.

\*Derivatives. Paper.  
CARD: 1/1

CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84331  
AUTHOR : -  
INST. : -  
TITLE : Utilization of Sawdust in the Manufacture of  
Paper

ORIG. PUB. : Tsa ou chih kung yeh, k958, No 12, 34-39

ABSTRACT : At the Chinese cellulose-paper factory Yun  
fang (city of K'un ming) in the production of  
sulfate wood cellulose (WC) is used sawdust.  
In the first stage, the sawdust is sifted and  
sorted (2-3mm X 1-2mm in size) and for the wood  
mass (WM) is sifted in the second classifying  
stage (1-2mm X 0.6-1.0mm in size). The techno-  
logical Process for the obtainment of WC and  
WM is described together with further treat-  
ment in the production of paper. Presented are

CARD: \*Derivatives. Paper.  
1/2

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 84331

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : technological characteristics and diagrams  
Con'd depicting special equipment: sawdust classi-  
fiers and WM grinding disc type mills.  
-- A. Zonntag.

CARD: 2/2

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84336  
AUTHOR : Ponnell, E.  
INST. : -  
TITLE : Possibility of Reducing Chlorine Consumption  
in the Existing Bleaching Installations, by  
Means of Increasing Fiber-Mass Density. I. \*\*  
ORIG. PUB. : Celul. si hirtie, 1959, 8, No 4, 117-121  
ABSTRACT : On the basis of laboratory and commercial  
production experiments it is proposed that  
technological schemes of bleaching, employing  
calcium chloride, be modified by the replace-  
ment of the single stage bleaching (using den-  
sity of approx. 7%) with a two stage bleaching  
while employing the same equipment and density  
of 10%, and having an intermediate washing  
  
\*\*Tests Performed at the "Rekonstruktsiya"  
Cellulose Plant (Sulfite Cellulose Section).  
\*Derivatives. Paper.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84336  
AUTHOR :  
INST. :  
TITLE :  
  
ORIG. PUB. :  
ABSTRACT : step. The reduction of Cl consumption as much  
Con'd as 19% may thus be attained.

CARD: 2/2

COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84343  
AUTHOR : Ch'e ch'eng-chi  
INST. : -  
TITLE : Regeneration of Soda from Effluent Streams of  
the Cellulose-Paper Production.  
ORIG. PUB. : Hua hsueh kung yeh, 1959, No 3, 7-8  
ABSTRACT : No abstract.

CARD: \*Derivatives. Paper.  
1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84384  
AUTHOR : Rowland, C.; Blundell, K.  
INST. : -  
TITLE : New Grinding Method of Paper-Mass with Conti-  
nuous Feeding  
ORIG. PUB. : Celul. si hirtie, 1959, 8, No 2, 42-45  
ABSTRACT : Presented is the comparison of paper-mass  
grinding methods in the washing troughs in  
accordance with the Blake-Clauson method  
(having a double cycle) and in accordance with  
the new grinding method equipped with a con-  
tinuous feeding. It is indicated that the new  
method has advantages of a continuous, assu-  
ring a possibility of operation with a cons-  
tant loading. The diagram is presented.

CARD: \*Derivatives. Paper.  
1/1



COUNTRY : HUNGARY H  
 CATEGORY : Chemical Technology. Chemical Products and Their Applications. Cellulose and Its \*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 84350  
 AUTHOR : Vamos, G.; Mero, T.  
 INST. : -  
 TITLE : Testing of Paper Made of Fir and Straw Cellulose  
 ORIG. PUB. : Papiripar es magyar graf., 1959, 3, No 2, 41-50  
 ABSTRACT : No correlation between properties of mixtures and the percent content of fir and straw cellulose (C), ground to varying degrees, was obtained. From the mixtures of fir and straw C, paper with an optimum static and dynamic strength may be obtained. Paper made from a mixture containing 20% of straw C and 80% wood C had higher tearing strength, higher "double" bending resistance, superior ability to dehydration, greater whiteness and increase  
 CARD: \*Derivatives.Paper.  
 1/2

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 84350  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : sed permeability to air at a lower energy consumption and lower linear deformation than values calculated from the respective concentration of components present in the mixture.  
 Con'd  
 CARD: 2/2

COUNTRY : POLAND H  
 CATEGORY : Chemical Technology. Chemical Products and  
 Their Applications. Cellulose and Its \*  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 84350  
 AUTHOR : Jaroszewski, J.; Poradowska, H.  
 INST. : -  
 TITLE : Experimental Production of the Electro-Insu-  
 lating Asbestos Paper  
 ORIG. PUB. : Przegl. papier., 1959, 15, No 5, 150-154  
 ABSTRACT : On the basis of laboratory and commercial  
 casting a conclusion was made pertaining to  
 the possibility of production of such a paper  
 from 100% asbestos. The conducted experiments  
 employed asbestos of the following different  
 grades: Soviet, African and Chinese. The best  
 results were obtained with the Soviet asbestos  
 type L-1-60, purified of the accompanying mi-  
 neral substances. As a binding agent, it is  
 recommended to employ starch as an additive to  
 a roll in a quantity of 5% basis weight of  
 \*Derivatives. Paper.  
 CARD: 1/2

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 84350  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : dry asbestos. It is possible to use other  
 Con'd. binding agent, that improve mechanical and  
 dielectric properties of paper. --Ye. Gurvich.

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84359  
AUTHOR : Decker, V.  
INST. : -  
TITLE : Manual Production of Asbestos Paper in Slova-  
kia  
ORIG. PUB. : Papir a celul., 1959, 14, No 3, 66-67  
ABSTRACT : A historical review. The bibliography includes  
6 titles. --D. Yakesh.

\*Derivatives. Paper.

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84360  
AUTHOR : Iliescu, G.; Popovici, V.  
INST. : -  
TITLE : Experiments on the Enrichment of Paper Fillers  
I. Kaolin.  
ORIG. PUB. : Celul. si hirtie, 1959, 8, No 4, 122-127  
ABSTRACT : After the description of the most applicable  
methods of enriching kaolin (K) the authors  
present data on the treatment of K with Na and  
Zn hydrosulfites, the result of which fully  
satisfy requirements of the paper industry.  
The results of commercial experiments are  
analogical to those obtained with imported K.

\*Derivatives. Paper.

CARD: 1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84362  
AUTHOR : Hochanz, E.  
INST. : -  
TITLE : Vegetable Gums and Their Application in the  
Manufacture of Paper.  
ORIG. PUB. : Przegl. papiern., 1959, 15, No 3, 74-77  
ABSTRACT : Review of literature for the past 10 years.  
The bibliography includes 19 references.  
-- Ye. Gurvich.

CARD: \*Derivatives. Paper.  
1/1

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84370  
AUTHOR : Wierzbicki, A.  
INST. : -  
TITLE : Production of Woodfibre Tiles in Poland in  
1958/59  
ORIG. PUB. : Przegl. papiern., 1959, 15, No 4, 111-114  
ABSTRACT : The total output of tiles in 1958 comprized  
64.5 thousand tons or 17.3 million m<sup>2</sup> (Poland  
occupies the 6<sup>th</sup> place in Europe after Sweden  
Finland, West Germany, Norway and France, ex-  
cluding USSR). Hard and porous tiles are being  
manufactured. The manufacture of tiles having  
hard surface is achieved by treating finished  
tiles with oil followed by thermal hardening.  
The same approach is being followed in the  
manufacture of perforated accustical tiles.

CARD: \*Derivatives. Paper.  
1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84370

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Experimental lacquered tiles, having nitro-,  
Con'd melamino-, and enameled coatings have been  
produced. In 1959 the increase in production  
forecast is expected to be 20% higher compared  
to 1958. -- Ye. Gurvich.

CARD: 2/2

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84383

AUTHOR : Diaconescu, V.; Feldman, D.; Asandei, N.  
INST. : -  
TITLE : Modern Testing Methods in the Cellulose-Paper  
Industry

ORIG. PUB. : Celul. si hirtie, 1959, 8, No 3, 77-87

ABSTRACT : A review of chromatographic, spectroscopic  
(in the ultraviolet and infrared regions) and  
certain methods, employing isotones, that find  
an ever increasing application in the cellulose-paper industry. Advantages of these methods  
are emphasized (with regard to their accuracy,  
rapidity of performance, specificity of application and reproducibility of the results)  
over the classical methods. Presented are 12  
diagrams and a schematic diagram depicting

\*Derivatives. Paper.

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhimi., No. 23 1959, No. 84388

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the apparatus (including the ion exchange  
Con'd chamber) that employs isotones. The bibliogra-  
phy covers 60 references. -- A. Marin.

CARD: 2/2

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Cellulose and Its \*

ABS. JOUR. : RZKhimi., No. 23 1959, No. 84386

AUTHOR : Gavrilescu, G.  
INST. : -  
TITLE : Maintenance, Adjustment and Calibration of the  
"Square" Balances.

ORIG. PUB. : Celul. si hirtie, 1959, 8, No 2, 60-61

ABSTRACT : Reviewed is the schedule of exploitation of  
the "square" balances used in paper factories.  
Balances must be checked monthly by an expe-  
rienced specialist. The results of his cali-  
brations must be entered into a record book  
A possibility of adopting balances to the  
handling of paper 100 x 100 cm inside and to  
the weighing of paper cut to a smaller size  
has been indicated. -- G. Markus

\*Derivatives. Paper.

CARD: 1/1

COUNTRY : RUMANIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Dyeing and Chemical \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84413  
AUTHOR : Lowy, A.; Pavel, D.; Hamarich, F.  
INST. : -  
TITLE : Experiments on the Sizing of Knobby Fiber at  
the "Vasia Vasilescu" Textile Plant  
ORIG. PUB. : Ind. textila, 1958, 9, No 12, 471-475  
ABSTRACT : Experiments on the sizing of knobby fibers  
with the aid of carboxymethylcellulose (I)  
were conducted for the purpose of complete  
substitution of starch. In the preparation of  
sizing solution I is soaked in water for 20  
hours prior to mixing in an agitator at 40-45°  
with the addition of sulfated oil. Experiments  
revealed the following: from the technological  
standpoint I may replace starch when employed  
\*Treatment of Textile Materials.

CARD: 1/3

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84413  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : in sizing of knobby fibers; an increase in  
Con'd the fiber strength and decrease in their elas-  
ticity is somewhat lower than they are when  
starch is used for sizing, however, this does  
not affect adversely productivity of the wea-  
ving machines; pH of the sizing solution made  
with I, has to be adjusted from 10.5 to 8.0-  
8.5; in order to insure a rapid dissolution,  
I has to be used in the form of a powder. Re-  
moval of the sizing is achieved by washing  
in warm water at 40-50° in the course of 15-  
20 minutes. In the bleaching of fabrics,

CARD: 2/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84413

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the removal of I takes place when the fabric  
Con'd is boiled. --G. Markus

CARD:

3/3

COUNTRY :  
CATEGORY :

YUGOSLAVIA

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84424

AUTHOR :  
INST. :  
TITLE :

Priskic, I.

-

Trends in the Development of Dyeing

ORIG. PUB. : Tekstil, 1959, 8, No 3, 179- 188

ABSTRACT : Review of the conditions prevailing in the  
textile dyeing industry during the past 20  
years. An attempt is made to explain wide  
use of certain classes of dyes and of dying  
methods with the present-day developments in  
the realm of chemistry and particularly in  
the realm of synthetic fibers. -- T. Budkevich

\*Treatment of Textile Materials.

CARD:

1/1



COUNTRY : CHINA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Dyeing and Chemical\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84453

AUTHOR : Liu Ching-lin  
INST. : -  
TITLE : New water Repellant Preparation -- CR -- and  
its Application

ORIG. PUB. : Jen chen t'ung bao, 1958, No 11, 38-39

ABSTRACT : A new preparation, CR, has been synthesized,  
that results in stable water repellant proper-  
ties of the fabrics. It is being employed in  
the treatment of cotton, silk, acetylcellulose  
viscose and nylon fibers. It may also be ap-  
plied to leather and other materials. The so-  
lution for the impregnation of textiles is  
prepared, for example, in the following manner:  
the CR preparation is mixed with 10 times its  
volume of cold water, the mixture is then

\*Treatment of Textile Materials.

CARD: 1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84453

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT

heated to 90-95°, followed by the dilution  
with water down to a desired concentration and  
by cooling to a temperature < 40°. After the  
impregnation fabrics are dried at 60-70°. The  
above preparation may be employed for the  
treatment of fabrics in an admixture with urea-  
formaldehyde resin precondensate. --A. Zonntag

CARD: 2/2

COUNTRY : YUGOSLAVIA H  
CATEGORY : Chemical Technology, Chemical Products and  
Their Applications. Dyeing and Chemical \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84454

AUTHOR : Recnik, F.  
INST. : -  
TITLE : Basic Impregnation Methods for Rendering  
Fabrics Water-Tight and Water Repellent

ORIG. PUB. : Tekstil, 1959, 8, No 3, 202-207

ABSTRACT : Waterproofing of the fabrics in the textile industry is achieved through the application of layers of Al, paraffin waxes, silicones, octadecyloxymethylpyridine chloride and other substances. Presented are the trade names of substances used for waterproofing, methods of their application, and also testing methods to determine the degree of water-tightness and water-repellent characteristics.

-- T. Budkevich.

\*Treatment of Textile Materials.

CARD: 1/1

COUNTRY : HUNGARY H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Dyeing and Chemical \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84465

AUTHOR : Rusznak, I.; Fehervari, M.; Dolesch, I.; \*\*  
INST. : -  
TITLE : Newest Findings in the Stability to Light of  
Dyed Textiles and Dyes.

ORIG. PUB. : Magyar textiltechn., 1959, 11, No 3, 104-106

ABSTRACT : Investigation of the dye fading mechanism of the textile fabrics and dyes in the exposure to ultraviolet light permitted establishing the fact that the damage to cellulose depends upon the wavelength of ultraviolet light. The rate of fading in the case of oxyazodyes is greater than that of the corresponding amino-derivatives; in the displacement of meta-position < orto-position < para-position.

\*\*Halasz, E.

\*Treatment of Textile Materials.

CARD:

COUNTRY : H  
CATEGORY :

ABS. JOUR. : RZKhim., No. 23 1959, No. 84465

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : A method for making dyes fast developed for  
Con'd the basic dyes (potassium ferrocyanide), that  
increases the stability of dyeing not lesser  
than the treatment with phosphomolybdic acid.  
The formation of dye pigment occurs directly  
on the fiber surface during dyeing of fabrics  
that includes fixation with naphtholformalde-  
hyde solution. -- S. Rosenfel'd.

CARD: 2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Leather. Fur. Gelatine.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84516

AUTHOR : Krzywicki, E.  
INST. : -  
TITLE : Crinckled Leather for Shoe Tops

ORIG. PUB. : Przegl. skorzany, 1958, 13, No 7, 163-168

ABSTRACT : The characteristic peculiarity of crinckled  
leather is its softness and body as compared  
to the cut leather that resembles oil cloth  
to the touch. Most often for the manufacture  
of crinckled leather large raw hides are being  
employed, thus obtaining a very strong (to  
tear) and non-elastic leather. Good results  
in obtaining crinckled leather are feasible  
when employing raw pig hides, since pig lea-  
ther easily loses its characteristic grain

\*Tanning Materials. Industrial Proteins.

CARD: 1/6

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84516

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : and its appearance is thus enhanced. In addition to this, numerous texture imperfections of pigs hides become less prominent after crinkling. Nevertheless, in the treatment of pig leather, having crinkled topside, a good selection of hides derived from mature animals and freshly pickled, is required. The following procedure is normally employed. After a considerable washing and mechanical deoiling the hides are smeared with a hair-removing substance along the flesh side, and are allowed to remain smeared for 16-18 hours.

CARD: 2/6

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84516

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : Hair is then carefully removed with a wooden  
Con'd knife. The de-haired hides (without washing) are treated for 8 hours in a slowly rotated drum with  $\text{Na}_2\text{S}$  solution. The drum rotates intermittently. The ashing (purely alkaline) is conducted in the same drum during the next 8 days followed by a thorough washing. The deashing is achieved with  $(\text{NH}_4)_2\text{SO}_4$ . The de-greasing is conducted at 35° with the "levapor PL" preparation, softening for 3 hours, washing and cleaning of the top layer. Softening of the raw hides must be a complete one,

CARD: 3/6

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84516

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : soft and must leave an imprint when pressed with a finger. The raw hide is then treated in a bath containing 100% water and 8% NaCl (basis the weight of hide), to which a dilute  $H_2SO_4$  solution is slowly added. Raw hides are left for approx. 12-18 hours in the drum followed by rotating it for 15-20 minutes. pH of the spent pickle solution is 3.5-3.7. The pickled raw hides are then transferred into an empty drum, adding 5% of sawdust and 3% "tannigan supra LH" in the form of a powder, and after rotating the drum for 1 hour, a mixture

CARD: 4/6

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84516

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : containing 25% "tannigan supra LH", 2.5% acetic  
Con'd acid (85%) and 5% water at a temperature of 20°. This is then followed by the rotation for 1.5 hours followed by the addition of 2% formaldehyde, diluted with 2% water and agitation for 30 minutes. The semi-finished hides are placed for approx. 12-18 hours on the racks, washed for 3-5 minutes with water (35°) followed by the finishing tanning in a bath containing 100% water (35°) and 5% "retingen R4B". After 45 minutes of agitation (rotation) a distinct crinckling of the top side becomes

CARD: 5/6

COUNTRY : H  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 84516  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : apparent. Fixation of this crinckling is attained with the use of the basic solution of chromic salt or with the "chromozal" preparation (6% by weight of raw hides at a 50% alkalinity). Hides are agitated with the above solution for 2 hours, followed by the addition of  $\text{Na}_2\text{CO}_3$  solution (slowly). pH of the tanning bath must be 4.3. -- M.Luksemburg.  
 Con'd  
 CARD: 6/6

COUNTRY : CZECHOSLOVAKIA H  
 CATEGORY : Chemical Technology. Chemical Products and Their Applications. Leather. Fur. Gelatine.\*  
 ABS. JOUR. : RZKhim., No.23 1959, No. 84519  
 AUTHOR : Snicka, M.; Krbovsky, V.  
 INST. : -  
 TITLE : Recent Czechoslovakian Investigations on the Production of Shoe Sole Leather by Chrome-Vegetable Tanning and Comparison of the Results  
 ORIG. PUB. : Kozarstvi, 1959, 9, No 1, 6-9, 14  
 ABSTRACT : A review of works pertaining to short-cutting in the technological processing as well as to individual technological methods. The bibliography covers 61 titles.-- M. Luksemburg.

\*With Those Attained Abroad.

\*Tanning Materials. Industrial Proteins.

CARD:

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Leather. Fur. Gelatine\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84520

AUTHOR : Vago, G.; Reti, J.; Vargova, P.  
INST. : -  
TITLE : Auto-Oxidation of Vegetable Oils in the  
Leather Industry

ORIG. PUB. : Kozarstvi, 1959, 9, No 2, 41-44

ABSTRACT : The auto-oxidation of vegetable oils and its  
detrimental effect on the quality of top shoe  
leather were investigated. The spoilage occurs  
mainly due to heating of the dried, unfinished  
and highly greased top shoe leather. Suitabi-  
lity of an oil for leather greasing may be  
controlled by determining its iron content,  
oxidation number and iodine number. It is  
recommended that in the greasing of leather,  
oxidation retardants/inhibitors be employed

CARD: \*Tanning Materials. Industrial Proteins.  
1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84520  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : together with the exclusion of sunflower oil.  
Con'd If this is not possible, the mild sulfonation  
of the latter is recommended. Tanning proper-  
ties of the epoxy-compounds were also studied.  
-- M. Luksemburg.

CARD: 2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Leather. Fur. Gelatine\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84521  
AUTHOR : Lasek, W.; Michalec, T.; Kozubek, M.  
INST. : -  
TITLE : Chrome Leather With Refined Top Side  
  
ORIG. PUB. : Przegl. skorzany, 1959, 14, No 2, 50-58; No 3,  
81-90  
ABSTRACT : Effect of the finishing tanning employing  
vegetable and synthetic tanning agents on the  
physical and chemical properties of chrome  
leather was studied. In the filling up of lea-  
ther, predestined for finishing and refining  
of top side, the best substances for the pur-  
pose are extracts of mimosa, neutralized  
chestnut, quebracho (sulfonated and non sul-  
fonated) and oak; the use of 6% tannides,  
basis the weight of leather, increases the  
  
\*Tanning Materials. Industrial Proteins.  
CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84521  
AUTHOR :  
INST. :  
TITLE :  
  
ORIG. PUB. :  
ABSTRACT : thickness of peripheral regions by 20%.  
Con'd The use of cation latex as the first coating  
and the addition of diene latex to the under-  
coat, improves physical properties of the co-  
vering layer of leather having a refined top  
layer. The addition of pigments to latex or  
to synthetic resins tends to improve quality  
of the coating film, while the addition of  
caseine increases hardness and lowers the  
stability of a film with respect to repeated  
bending. -- D. Gorin.  
CARD: 2/2



COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Leather. Fur. Gelatine\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84523

AUTHOR : Zitko, V.  
INST. : -  
TITLE : Photometric Determination of the Titration  
End Point for Tanning Agents in Accordance  
with the Lowenthal's Method  
ORIG. PUB. : Chem. zvesti, 1958, 12, No 9, 533-542

ABSTRACT : To 1-15ml of tannide solution are added 0.7ml  
of 1% solution of indigocarmin (I), 2ml of  
dilute  $H_2SO_4$  (8.62g. in 100ml), water up to  
100ml total volume, subjecting the obtained  
mixture to titration with 0.1 n.  $KMnO_4$  (II)  
solution in repecticals of the Lange colori-  
meter, while employing IF 465 filter. The de-  
pendency of the solution extinction on the  
quantity of added II, near the equivalence

\*Tanning Materials. Industrial Proteins.

CARD:

1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84523

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT  
Con'd

: point (EP) is represented by two straight  
lines that intersect at the EP. The titration  
is conducted till a constant minimum value  
of extinction is reached, which does not  
change upon further addition of II. The me-  
thod renders more reproducible results than  
when the titration is carried out with the  
reliance on the visual observation of end-  
point reached with indicator I. With the in-  
crease of acidity of the titrated solution,  
the error increases. The rate of II addition  
does not affect accuracy of determinations.

-- N. Turkevich.

CARD:

2/2

COUNTRY : POLAND H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Leather. Fur. Gelatine\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84525  
AUTHOR : Dzieza, R.  
INST. : -  
TITLE : Pickling in the Processing of Fur Coat Stocks

ORIG. PUB. : Przegl. skorzany, 1959, 14, No 2, 35-42

ABSTRACT : Based on the critical review of literature on the effect of pickling encountered in the production of furs, the following conclusions were made: 1) for thin furs it is necessary to reduce acid content of pickle solutions ( $\leq 3.5 - 4.0\%$   $H_2SO_4$  basis weight of raw materials); the duration - 24 hours, 32 - 37.5° temperature; it is not feasible to employ increased  $H_2SO_4$  concentrations; it is advantageous to neutralize raw materials after

CARD: \*Tanning Materials. Industrial Proteins.  
1/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84525

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : pickling; 2) it is advisable that prior to  
Con'd pickling the raw materials be subjected to formaldehyde tanning, that leads to an improvement of leather quality, renders it soft, insures its qualities with respect to body, elasticity and texture to the touch; 3) the use of preliminary formaldehyde tanning retards hydrolysis of the collagenic fibers of the hides when immersed in pickle solutions of high acid concentrations; 4) loosening of the raw hide texture may also be attained through

CARD: 2/3

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84525

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the use of salt solutions; 5) the employment  
Con'd of formic acid for pickling gives better re-  
sults than the use of sulfuric acid.  
-- M. Luksemburg.

CARD: 3/3

COUNTRY : RUMANIA  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Leather. Fur. Gelatine.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84529

H

AUTHOR : Alexa, G.; Chirita, A.  
INST. : Rumanian Acad.  
TITLE : Problems in the Application of Willow Bark  
a Tanning Raw Material in the RDR.- Part II.

ORIG. PUB. : Studii si cercetari stiint. Acad. RPR Fil.  
Iasi. Chim., 1958, 9, No 1, 105-114

ABSTRACT : This investigation covered the determination  
of tannide content (T) in different varieties  
of willow tree family and in particular in  
Salix fragilis. For the latter variety the  
following determinations were made: optimum  
extraction temperature, T content, content of  
sugars, the age and season when bark was col-  
lected. Bark may be taken off the trees du-  
ring the "vegetation" period, since T content  
remains almost constant, while the quality  
goes through an optimum in July, August and

\*Tanning Materials. Industrial Proteins.

CARD:

1/2

COUNTRY :  
CATEGORY :

H

ABS. JOUR. : RZKhim., No. 23 1959, No. 84529

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : September. Tannides contained in willow bark  
Con'd belong to the pyrocatechnic group. For Part  
I see Ref. Zhur.-Khimiya, 1959, No 15, 55915.  
-- D. Gorin.

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Leather. Fur. Gelatine. \*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84530

AUTHOR : Kotasek, Z.  
INST. :  
TITLE : Interaction Between Polyphenols and Polyamides  
in the Chromatography of Syntanes

ORIG. PUB. : Kozarstvi, 1959, 9, No 2, 35-37

ABSTRACT : A brief review of the results obtained in  
chromatography of certain Czechoslovakian  
syntanes and their phenolic components. Chro-  
matographic paper, impregnated with polyamides  
and polyamide packed columns were used in  
these tests. Theoretical considerations in-  
volved in the interaction between polyphenols  
and polyamides are discussed with allowances  
made for the evaluation of tanning properties  
of phenolic syntanes. -- M. Luksemburg.

\*Tanning Materials. Industrial Proteins.

CARD: 1/1

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Leather. Fur. Gelatine.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84533  
AUTHOR : Halamek, C.; Lacnar, J.; Nemec, B.; Snickova, J.  
INST. : -  
TITLE : Reduction of Swelling of the Flesh Side Gel-  
latine

ORIG. PUB. : Kozarstvi, 1958, 8, No 9, 261-263

ABSTRACT : According to literature data, the swellability  
of the flesh side gellatine may be reduced by  
a factor of two, if the dry product is kept  
for 48-100 hours in the atmosphere of air,  
saturated with steam at 50°. This method pro-  
duces dependable results, but requires pro-  
vision of humidifying chambers as well as in-  
creased operating cost as the result of the  
repeated drying. Based on the above conside-  
rations, it is more economical to obtain

\*Tanning Materials. Industrial Proteins.

CARD: 1/2

COUNTRY : H  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84533  
AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : gellatine of a reduced swelling characteristic  
Con'd through the adjustment of certain conditions  
in the process of its derivation (pH, average  
concentration, drying conditions).

-- M. Luksemburg.

CARD: 2/2

COUNTRY : CZECHOSLOVAKIA H  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Leather. Fur. Gelatine.\*  
ABS. JOUR. : RZKhim., No. 23 1959, No. 84535  
AUTHOR : Suchomel, A.; Mazanek, M.  
INST. : -  
TITLE : Certain Technological Considerations that  
Determine Physical Properties of Artificial  
Leather Containing Fibrous Reenforcements  
ORIG. PUB. : Kozarstvi, 1959, 9, No 1, 17-18  
ABSTRACT : Specific characteristics of artificial leather  
(made for various applications) are affected  
by individual steps involved in its technolo-  
gical processing, in addition to other fac-  
tors of extraneous nature. Described are cer-  
tain experimental works with allowances made  
for the basic and specific condition and of  
their application.

\*Tanning Materials. Industrial Proteins.

CARD: 1/1

COUNTRY :  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 1959, No.  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT :

CARD:

COUNTRY : CZECHOSLOVAKIA I  
 CATEGORY : High Polymer Chemistry  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 84552  
 AUTHOR : Schwertassek, K.; Doubek, J.  
 INST. : -  
 TITLE : Intrusion of Iodine into the Oriented Portions  
 of Cellulose Lattice and Accounting for Them  
 During the Determination of the Degree of\*  
 ORIG. PUB. : Textil (Ceskosl.), 1958, 13, No 10, 384-386  
 ABSTRACT : Validity of a determination method, proposed  
 previously by the authors, was checked. By  
 this method the degree of crystallinity of  
 cellulose may be determined as a function of  
 iodine sorption that occurs in the intrusion  
 of iodine into the lattice with concentrations  
 exceeding 8-12% iodine. It was established  
 that the effect of iodine penetration into the

\*Crystallinity With the Aid of Iodine Sorption  
 XIV. Dependence Between the Iodine Sorption  
 and Crystalline condition of Cellulose Fibers.

CARD: 1/2

COUNTRY : I  
 CATEGORY :  
 ABS. JOUR. : RZKhim., No. 23 1959, No. 84552  
 AUTHOR :  
 INST. :  
 TITLE :  
 ORIG. PUB. :  
 ABSTRACT : oriented portions of the lattice has little  
 Can'd effect on the determination results. The pre-  
 viously proposed diagram for the low percen-  
 tage inclusion of iodine, for the so called  
 "degree of gain" remains valid also for the  
 given instance. Presented is an additional  
 diagram, that permits the determination of  
 the crystallinity degree from certain values  
 of the "degree of gain". For Part XI see Ref.  
 Zhur.-Khimiya, 1958, No 22, 76010.  
 -- E.Kazbekov.

CARD: 2/2  
 1488 B  
 1615 C D G F  
 1723 E  
 1278 H I

FOR REASONS OF SPEED AND ECONOMY  
THIS REPORT HAS BEEN REPRODUCED  
ELECTRONICALLY DIRECTLY FROM OUR  
CONTRACTOR'S TYPESCRIPT

THIS PUBLICATION WAS PREPARED UNDER CONTRACT TO THE  
UNITED STATES JOINT PUBLICATIONS RESEARCH SERVICE,  
A FEDERAL GOVERNMENT ORGANIZATION ESTABLISHED  
TO SERVICE THE TRANSLATION AND RESEARCH NEEDS  
OF THE VARIOUS GOVERNMENT DEPARTMENTS